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THE MONTANA POWER COMPANY

1987 LONG RANGE PLAN

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Enclosed is a copy of The Montana Power Company's 1987 Long Range Plan filed with the Department of Natural Resources and Conservation pursuant to the Montana Major Facility Siting Act.

Sincerely yours,

Mike Manion

Michael P. Manion

enc.

RECEIVED
JUL 01 1987
MDHES
DIRECTOR'S OFFICE

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THE MONTANA POWER COMPANY

1987 LONG RANGE PLAN

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THE MONTANA POWER COMPANY

ANNUAL LONG RANGE PLAN

Filed on July 1, 1987
Pursuant to the Montana Major Facility Act

I.1 INTRODUCTION

Pursuant to Section 75-20-501 of The Montana Major Facility Siting Act (Act) and Section 36.7.1601-1606 ARM, The Montana Power Company (Company) submits, as of July 1, 1987, its annual Long Range Plan to the Montana Department of Natural Resources and Conservation (Department). Certain lengthy exhibits which are part of this Long Range Plan are not included with each copy of the plan but are available at the Butte office of the Company and are on file for inspection with the Department.

It should be noted that the information in this Long Range Plan represents the best efforts of the Company to set forth its plans and projections based on present knowledge, planning criteria, data and circumstances. Because present circumstances may unpredictably change, the plans and projections set forth herein may also necessarily change.

II. THE GENERAL LOCATION, SIZE AND TYPE OF THE UTILITY FACILITY TO BE CONSTRUCTED, OWNED AND OPERATED BY THE COMPANY, AND WHICH CONSTRUCTION IS PROJECTED AS OF JULY 1, 1987, TO COMMENCE DURING THE ENSUING TEN YEARS, AS WELL AS THOSE FACILITIES TO BE REMOVED FROM SERVICE DURING THE PLANNING PERIOD.[1]

II.1 ENERGY, POWER GENERATING AND ASSOCIATED FACILITIES

Exhibit A, attached hereto, reflects the current schedule relating to permitting and construction of electric generation resources under construction and resources scheduled for construction on the Company's system. The Company's load and resource projections result from a complex, continually evolving process and, therefore, are the subject of much attention and study. A reproduction of the booklet prepared by the Company, The Montana Power Company - 1987 - 2010 Projections of Electric Loads and Resources, April, 1987, is attached hereto as Exhibit B.

The current Resource Plan is documented in Tables 13 and 14 (pages 37 and 38) of Exhibit B, where the projected loads and resources in the base case (most likely scenario) are tabulated. These load-resource tabulations summarize the Company's base case peak and energy load obligations and the resources that are forecast to be available and are required for long term load-resource balance. Providing for adequate resources to maintain this

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1 Montana Major Facility Siting Act 75-20-501(2)(a).

balance over the planning period at the lowest cost possible is the goal of the resource planning effort.

II.2 NO GASIFICATION PLANT AND ASSOCIATED FACILITIES PLANNED

At this time, we have no plan for engineering, locating, siting, financing, or constructing a coal gasification plant.

II.3 ELECTRIC TRANSMISSION LINES

Electric transmission line construction projects projected to commence during the next ten years may be divided into two groups. The first group consists of those transmission lines for which application has or will most likely be made or for which a certificate of approval for construction has been received. A second group consists of transmission lines which are now or may be under study by the Company and for which application may be made during the next ten years. Whether and when these facilities will be built depends upon several factors, including the results of appropriate engineering and economic studies and future load growth.

II.3.1 Transmission For Which Application Likely

The transmission lines in this first group with their general location, estimated length, designated voltage, and approximate dates for filing of application, certification, centerline approval, preconstruction and construction are shown on the chart entitled "Transmission," marked as Exhibit C and attached hereto. Preconstruction

activities may include surveying and right-of-way acquisitions.

II.3.2 Transmission For Which Application May Be Made

The transmission line construction projects in the second group with their approximate general location, estimated length and designated voltage are shown on the chart entitled "Potential Transmission," marked as Exhibit D and attached hereto.

Additions to and integration of other resources to our system may require additional transmission construction, but no specific needs have yet been identified.

II.3.3 Possible Relocations or Upgrading of Transmission

Transmission lines that may be relocated, reconstructed or upgraded which constitute "facilities" or "associated facilities" under the Act are shown on the chart entitled "Transmission Projects for Conversion to Higher Voltage Levels or to be Reconductored or Reconstructed," marked as Exhibit E and attached hereto. Transmission lines that are not "facilities" or "associated facilities" under the Act are not included.

III. A DESCRIPTION OF EFFORTS BY THE COMPANY TO COORDINATE ITS PLANNING AND OPERATIONS WITH OTHER UTILITIES SO AS TO PROVIDE A COORDINATED REGIONAL PLAN FOR MEETING THE ENERGY NEEDS OF THE REGIONS[2]

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2 Montana Major Facility Siting Act 75-20-501(2)(b).

III.1 GENERAL

Two basic facts are evident from examining the results of coordinated regional planning. First, there is a great amount of cooperation among private and public utilities in the Pacific Northwest. Second, there are many benefits to the Company and other utilities in the Pacific Northwest and to their customers as a result of this regional cooperation.

The Company's contribution to regional efforts to improve system reliability and availability of power supply is directed primarily to cooperation with other utilities in the Columbia River Basin of the Pacific Northwest because that Basin constitutes a logical planning unit from an historical, geographical and electrical system standpoint.

The Company has many agreements, as described in some detail in Section III.2, with other utilities in the Columbia River Basin. The Company meets regularly with the publicly-owned utilities (such as rural electric cooperatives, municipal utilities, and public utility districts) with privately owned utilities (such as Puget Sound Power & Light Company, The Washington Water Power Company, Portland General Electric Company, Pacific Power and Light Company, etc.), and with government agencies (such as Bonneville Power Administration, Corps of Engineers and Western Area Power Administration). The Company also works closely with rural electric cooperatives and other utilities operating in Montana.

III.2 COOPERATION AMONG UTILITIES

Cooperation among utilities in the Pacific Northwest has evolved historically, and now is structured by various organizations and agreements. For example, these organizations and agreements include:

(1) Western Systems Coordinating Council which was organized August 4, 1967, to promote reliability of bulk power electric systems in the West. Members now include twenty (20) investor-owned and twenty-seven (27) publicly or cooperative-owned systems as well as fourteen (14) affiliated member electrical systems. The area covers all or parts of fourteen (14) western states, Alberta, and British Columbia. The purpose of the Council is to provide a formal means for exchange of data and information and to furnish regional studies and recommendations that will have a favorable impact on the reliability and adequacy of electric service in the West.

(2) The Pacific Northwest Utilities Conference Committee consists of 108 non-federal public agencies and seven private companies. Its purposes include the coordination of load-resource planning in the Northwest region. The Company is an active member of the Committee.

(3) The Northwest Power Pool, of which the Company is one of the organizers, coordinates the bulk power system operation in the Northwest area. It is a long-standing and successful voluntary power pool and one of the oldest in the nation. Members of the Northwest Power Pool

coordinate their respective bulk system operations to enhance reliability and efficiency.

(4) The Intercompany Pool (ICP) is a contractual power pool organization of eight investor-owned utilities The ICP's expressed purposes include joint planning for additional required resources and transmission, pooling of reserve requirements, and optimizing use and distribution of secondary energy among the members.

(5) The Pacific Northwest Coordination Agreement was completed in 1964 after years of negotiation among private and public utilities on the Columbia River System. Its principal purposes are to coordinate and optimize hydro generation operation and to allow equitable distribution of benefits from hydro storage developments in the Columbia River Basin.

(6) The Pacific Northwest Power Company, of which the Company is a participant, was formed to pursue development of hydro-generation, particularly on the Snake River.

(7) Other agreements among individual utilities, such as the AMPS Agreement (Associated Mountain Power Systems), consisting of Pacific Power and Light Company, Utah Power and Light Company, The Washington Water Power Company, The Montana Power Company and Idaho Power Company, are designed to facilitate exchange of power and sharing of transmission capacity. For a limited period, this agreement also provided for sharing the costs and outputs of particular steam-generating plants in Wyoming.

(8) The Company and the United States Bureau of Reclamation are parties to the Missouri River Coordination Agreement which is designed to optimize water power resources in the Missouri River Drainage.

(9) There are also agreements and working relationships with federal agencies such as the Bonneville Power Administration and the Western Area Power Administration, and with various rural electric cooperatives in the State of Montana such as the Central Montana Electric Power Cooperative.

(10) The Western Systems Power Pool (WSPP), which began operations in May, 1987, is an experimental power pool authorized by FERC. The two-year WSPP experiment is intended to test whether participants' generation and transmission facilities can be used more efficiently in an environment of broader information exchange and more flexible pricing. Members now include twenty-two (22) investor owned, publicly owned or cooperative owned systems whose loads and resources present natural opportunities for a coordinated market.

III.2.1 Benefits of Regional Cooperation

The benefits of such regional agreements and organizations as discussed above are:

(1) Maximizing the efficient use of resources, including potential for seasonal exchanges;

(2) Minimizing the cost of energy to utility customers;

(3) Providing reliability and better service; and

(4) Minimizing environmental impacts.

These benefits and objectives are studied and pursued vis-a-vis climates, water sheds, time zones, types of loads, etc., of each utility in the region. The exchange of power among utilities in the joint participation, construction and operation of facilities inures to all of these objectives.

An example of the results from this type of regional planning by the Pacific Northwest utilities is found in the annual Northwest Regional Forecast of the Pacific Northwest Utilities Conference Committee, which lists the combined resources available to meet those loads. Included in these resources are many jointly-planned plants to supply future resource requirements.

Several benefits accrue from regional inter-utility cooperation. First, it allows a utility, like The Montana Power Company, which may have energy deficiencies over a period of years, to import firm power from other utilities in order to meet its deficiencies when such arrangements can be negotiated and arrange exchanges to optimize regional and in-state resources. These arrangements may allow the utility to avoid building small, costly facilities for each incremental increase in load. The utility may be an importer for a period of time and alternatively be an exporter. This exchange of power among utilities in the Northwest may also occur at certain times

of the year and times of the day because of the diversity of peak loads among utilities in this region.

Second, regional cooperation and interconnected systems provide greater reliability to the customers of the regions. For example, if one utility's generation or transmission is out of service, another utility's facilities may help provide service for the utility whose facilities are out of service.

Third, for the same amount of energy and service, the cost of construction and operation of fewer large facilities is less than the cost of construction and operation of many smaller facilities. This helps get energy to customers at the lowest possible cost.

Fourth, fewer large facilities often have less environmental impact than many smaller facilities. For example, one larger transmission line may be built in lieu of several smaller transmission lines.

In summary, these objectives and resulting benefits of regional cooperation are in the interest of each utility and its customers. The Company believes that regional cooperation was envisioned in the Act.

III.3 EXCHANGE AGREEMENTS

Previously a list of exchange, pooling and interconnection contracts dated June, 1985, was submitted to the Department.

An updated version of the list, dated July, 1987, and marked Exhibit F is attached hereto.

IV. A DESCRIPTION OF THE COMPANY'S EFFORTS TO INVOLVE ENVIRONMENTAL PROTECTION AND LAND USE PLANNING AGENCIES IN THE PLANNING PROCESS, AS WELL AS OTHER EFFORTS OF THE COMPANY TO IDENTIFY AND TO MINIMIZE ENVIRONMENTAL PROBLEMS AT THE EARLIEST POSSIBLE STAGE IN THE PLANNING PROCESS[3]

IV.1 GENERAL ENVIRONMENTAL POLICY

It is the Company's policy to participate with federal and state agencies, as well as public interest groups and citizens, to encourage coordination of energy and environmental programs.

IV.2 PARTICIPATION IN LAND USE AND ENVIRONMENTAL PLANNING

The Company continues to research new environmental technologies.

As part of the work on Colstrip Units 3 and 4, the engineering staff has worked closely with the United States Environmental Protection Agency (EPA) on meteorological and air quality modeling to meet Class I air quality standards of the Northern Cheyenne Indian Reservation, south of Colstrip. Venturi wet scrubbers, which were substantially new technology when installed by the Company at Colstrip Units 1, 2 and 3, are now used at Unit 4. Also, a process

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3 Montana Major Facility Siting Act 75-20-501(2)(c).

that employs dolomitic lime to increase sulfur dioxide removal from emissions has been developed for use at Colstrip Units 3 and 4.

The Company provides the Montana Department of Health and Environmental Sciences with monthly ambient air quality reports from monitoring stations in the Colstrip vicinity. The Company provides the Department with periodic groundwater quality reports from sample wells at Colstrip. Under the Montana Pollution Discharge Elimination System of the Clean Water Act, the Company also provides the Department and the EPA with quarterly water quality reports on discharges from the Company's sewage treatment plants and monthly reports on water discharge from the J. E. Corette Generating Plant at Billings. For work that may impact water quality the Company has and will continue to cooperate and work with State and Federal agencies.

The Company is conducting, supporting or participating in a number of environmental studies. At Colstrip, studies underway include monitoring the water in the settling ponds, conducting a long-term infrared study of the 200-square-mile area surrounding Colstrip, and surveying vegetation through a study contracted to the Montana Agricultural Experiment Station. Throughout the rest of the state, the following activities are ongoing: a major ecological modeling program is being developed to facilitate coordination of the many studies (several of which are funded by the Company) being conducted in the Flathead

Basin; a study is continuing on sediment loading of the Clark Fork River near Missoula; and general biological surveys are proceeding on the Clark Fork River near Thompson Falls. Also, recreation and archeological resource analyses have been completed for Thompson Falls and are in progress for Flathead Lake and the Missouri River near Helena and in the Great Falls area.

In transmission projects, it is the the Company's policy, early in the planning process, to involve appropriate land-use planners at the federal, state and local levels as well as individual landowners. Environmental assessments are provided by the Company for projects that affect waterways, federal lands or state lands. The Company also submits formal comments on land-use plans proposed by federal agencies.

The Company's environmental, real estate and engineering staffs are comprised of a rather wide background of expertise. The disciplines represented are wildlife and fishery biology, limnology, geology, recreation resource management, forestry, archeology, agricultural economics, socioeconomics, environmental and land engineering, electronic and computer technology. Expertise is kept up-to-date by on-going participation in various professional associations. Active membership is maintained in the following: Ecological Society of America, American Fisheries Society, North American Benthological Society, Power Biologists Association, Air Pollution Control

Association, American Chemical Society, The National Recreational & Park Association, the American Economic Association, Montana Historical Association, Lewis and Clark Trail Heritage Foundation, the Montana Archeological Association, the International Right of Way Association, American Society of Farm Managers and Rural Appraisers, Society of Real Estate Appraisers, Appraisal Institute, American Institute of Real Estate Appraisers and the Montana Association of Registered Land Surveyors. The staff also participates in various state and federal environmental activities. Additionally, the Company is a member of the Western Utility Group, an ad hoc committee which addresses and monitors federal land-use issues.

V. PROJECTIONS OF THE DEMAND FOR SERVICES RENDERED BY THE COMPANY AND EXPLANATION OF THE BASIS FOR SUCH PROJECTIONS, AND A DESCRIPTION OF THE MANNER AND EXTENT TO WHICH THE PROPOSED FACILITIES WILL MEET THE PROJECTED DEMAND[4]

V.1 GENERAL

The Company continuously monitors the demand for electricity and studies and pursues alternate resources to meet the demand. In addition to following the national and regional trends in energy use and developments in resource

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4 Montana Utility Siting Act Section 75-20-501(2)(d).

technology, the Company also makes load and resource forecasts for its own system.

V.1.2 Load Forecast and Resource Plan

The load forecast and resource plan are reviewed and updated frequently by the Company. The latest official forecast was published in April, 1987. The Company develops three load forecast and resource plans which represent three economic and demographic growth scenarios: the base case, low case, and high case. The energy and peak load forecasts and the resource plans for each of the three scenarios for twenty-four operating years (June through July) are shown in the tables contained in Exhibit B, pages 37 through 42.

V.1.2.1 Process and Assumptions

The electricity sales forecast is developed with the aid of an electricity forecast model. An explanation of the electricity forecast model and the input assumptions behind the base case sales forecast are explained on pages 1 through 9 of Exhibit B. The electricity forecast model is a computer model that quantifies MPC's customers' annual electricity requirements into five major categories: Residential, Commercial, Industrial, Contract Industrial, and Other. This model simulates the interaction between MPC's electric customers' forecast electricity requirements, the cost of acquiring sufficient electricity resource to maintain load resource balance, and the revenue generated

from out of state sales of electricity of any electricity surplus to our customers' needs.

The annual energy load forecast, the basis of the Company's long range energy resource plan, is developed when losses are added to the electricity sales forecast. The annual energy load is then shaped into the monthly energy loads by taking into account the seasonal patterns of electricity consumption. The system peak load forecast, the basis of the Company's peak resource plan, is developed from the forecast of monthly energy loads by quantifying the difference between the energy load and the maximum one hour demand.

The Company's long range resource planning process is explained on pages 16 and 17 of Exhibit B. This planning process embraces the philosophy of identifying the set of future resources that maintain the balance between electric resource acquisition and the Company's electric customers' needs at the lowest possible cost to our customers.

V.1.2.3. Base Case Results

The base case electricity forecast results, the product of the electricity forecast model, are described on pages 10 through 12 of Exhibit B. The base case energy and peak loads are both forecast to grow at 1.4% from 1987 through 1997 and at 1.1% from 1997 through 2010.

On pages 20 through 23 of Exhibit B, the base case energy and peak load resource plans are described. Some of the salient features of this year's base case energy and

peak load resource plans are: (1) Colstrip Unit 4 is not included as a firm resource to serve MPC's electric resource requirements; (2) the Corette plant in Billings is at the end of its expected useful life in 2004; (3) the Milltown upgrade is included with a project completion of January 1988 (note: since publication, the project completion has changed to March 1989 as noted in Exhibit A); (4) the Frank Bird Plant refurbishment and 15 year life extension is included with a project operation date of November 1989; (5) the Company has two interruptible contracts for at total of 76 MW; (6) the two firm inter-utility resource supply contracts that the Company has, WNP #1 and Peak for energy exchange, will expire in 1996 and 2001, respectively; (7) the Company anticipates an increase of independently owned Qualifying Facilities as it's avoided cost increases; (8) the Company has a commitment to develop energy and peak load savings through programmatic conservation efforts.

V.1.3. Substation Load Analysis by Unit Area

In addition to making load and resource forecasts for its total system, the Company also monitors loads on each of its approximately 600 substations throughout its service area. The monthly peak and average kilowatts used at each of these substations during 1986 are shown in Exhibit G, entitled "1986 Peak and Average Kilowatt Readings for Distribution Substations, 01/23/86 - 01/22/87" which is

lengthy; therefore, only one copy will be submitted to the Department along with this Long Range Plan.

Future demand patterns of a substation unit area for annual increments for the next ten years are shown on the table marked Exhibit H entitled, "1987-1996 Projected Peak Report," which is lengthy; therefore, only one copy will be submitted to the Department along with this Long Range Plan. The area that each of the substations serve and the substation are identified by an installation number shown on a map which will also be separately submitted to the Department.

The "NA" designation on the report indicates that the load for that particular substation was not acceptable or not available. This designation is a result of one of several possible reasons, including that the reported substation load was obviously incorrect or no reading was reported.

The Projected Peak Substation Load shown on the report is based on a recording period from April through March in each year.

The column headings are the year in which the recording period started. This is done so that winter peaks may be recorded for the three consecutive winter months of December, January and February; i.e., the 1986 peaks include December of 1986 and January and February of 1987. The peaks indicated are not coincidental. They represent the

maximum peak reading anticipated for that season and may occur at any time during that season.

The basic projections were made by developing a compound growth curve using a least squares analysis of the existing data. The projections were then analyzed for their validity, taking into consideration the number of years of data the projection was based on, recent trends in the area, and known load additions. If a projection made by this method is obviously not valid, a reasonable prediction is made based on historical and known load growth data for the area.

V.1.4 Manner of Meeting System Area Loads

Projections based on continuous monitoring of substations and other factors are studied by the Company to determine what expansion programs are necessary on its system. Expansion programs may mean increasing transformer size for capability, adding transformers, or building new substations, transmission or generation facilities. New substations or a shifting of loads from substation to substation or transformer to transformer may give an erroneous impression of actual area growth. A careful analysis of changes that have taken place is necessary to determine actual load growth in an area. To establish load growth rates, many factors must be considered and analyzed. Weather conditions, extended outages, switching of loads, construction procedures, industrial and commercial development, urban development, development of residential sub-

divisions, irrigation and pumping, electric space heating and air conditioning requirements, changes in life styles, and the impacts of alternate energy sources are some of these factors that must be considered since they may affect load growth rates. It should be noted that the sum of the individual substation loads is not equal to the total system load forecast for two major reasons: (1) the substation loads do not include transmission losses sustained on the system between the resource and the substation, and (2) there is substantial diversity among the times of the individual substation peak loads. In load flow and stability computer studies of the entire system, the load distribution across the system is derived using proportionately "shrunk" substation loads so that their sum does equal the total system load forecast. In detailed studies of particular areas of the system, the substation load forecasts are used unadorned since that particular area can be expected to experience its own undiversified load.

When it appears that additional transmission lines or generation are needed as a result of this monthly and yearly monitoring of substation load changes and as a result of all of the many other factors such as weather conditions, extended outages, switching of loads, industrial and commercial development, urban development, irrigation and pumping, etc., then more detailed studies of transmission line and generation requirements are made.

In addition to the continuous monitoring of the entire system by monthly and yearly changes, the Company also takes into consideration the anticipated trends in type of load growth. For example, the Company considers inquiries or requests for major additional loads from industrial, agricultural or other sources. The Company also considers and anticipates that certain uses of electricity, such as the use of electricity for sprinkler irrigation or home heating, will create substantial additions to its load demand.

The Company, in an attempt to fulfill its responsibility to provide electric service to its customers at the lowest possible cost, seeks to balance electrical resources against electrical load. This is done on both a peak and energy basis. The Company's forecasts must also include consideration of reserves which are required to assure that the Company can serve its customers at all times. The forecasts also take into account required down-time of generating plants and other facilities for maintenance and exchange contracts with other utilities. When it is determined that a new source of generation or transmission is needed, the Company considers the alternatives for meeting these requirements and makes further detailed studies regarding the needed facility. As pointed out in Section III, these studies are often conducted in cooperation with other utilities in the region.

V.1.5 Whether Projected Facilities Will Meet Projected Demands

The general size and type of utility facilities to be owned and operated by the Company, which are discussed in Section II above of this Long Range Plan, are a result of all of these studies and considerations regarding projection of demand on both a total system basis and on a substation unit basis. If the facilities that are proposed in Section II above are allowed to be built as scheduled by the Company, such facilities should adequately meet the projected demand. However, if new facilities, including transmission lines and generating plants, are delayed, customer demand may not be adequately met.

efb0030ks

6/23/86
Exhibit A

RESOURCE PLAN [1]

	1987				1988												
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1989	1990	1991	1992	1993	1994	1995	1996	1997
- Milltown	F	F	F	P	P	P	C	C	C								
- Bird	P	P	P	P	P	P	P	P	C	C	C	C	C(2)				

Fp - File Preliminary Permit Application
F - File Application With Appropriate Agencies
P - Preconstruction
C - Construction

Scheduled Commercial Operation Date

Milltown	March, 1989
Bird	November, 1989

1 Construction schedules reflect the base case in service date as per the MPC Planning Range as shown in Exhibit B, pp. 32-37. Timing is contingent upon continued re-evaluation of MPC forecasts of future load requirements.

2 The plant will be available for commercial operation November 1989 with continued refurbishment and life extension activities through 1993.

efb0031ks

THE MONTANA POWER COMPANY

PROJECTION OF ELECTRIC LOADS and RESOURCES

1987—2010

April, 1987

Exhibit B

THE MONTANA POWER COMPANY

Projections of Electric Loads and Resources

1987-2010

April 1987

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Introduction

This document is one in a continuing series which summarizes The Montana Power Company's electric supply and demand picture. MPC has a strong commitment to provide safe, reliable electric service for a reasonable price as our customers place their demands upon us. Further, the level of service required by MPC's customers will be provided in a manner which is compatible with the environment.

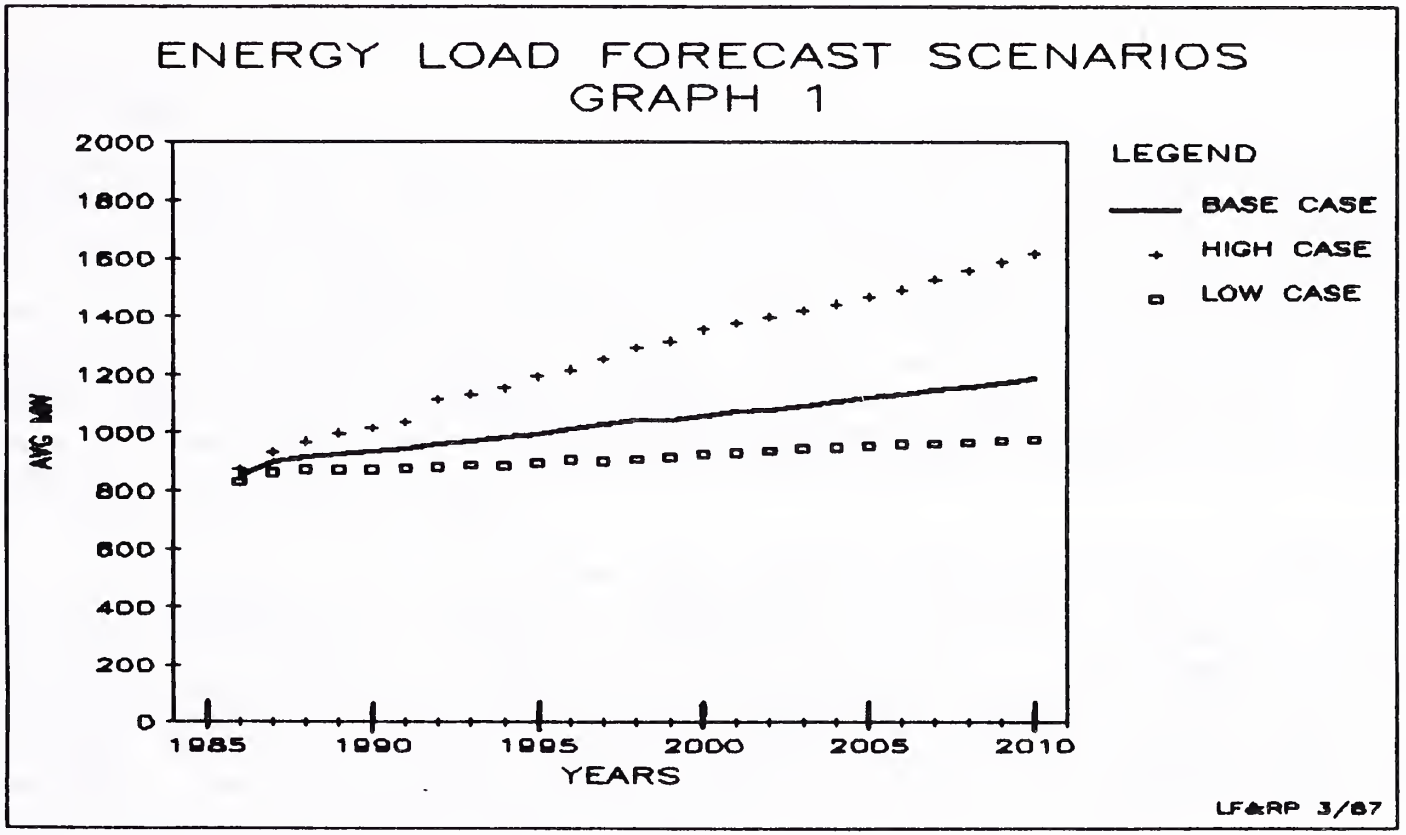
This document is intended for those who are interested in knowing what MPC expects future electricity sales levels to be and what resources are planned to meet these future requirements. The following sections covering loads and resources are directed toward a general audience and provide summary information on a very detailed, complicated process. Individuals desiring more information are advised to contact the Load Forecasting and Resource Planning Section in MPC's General Offices in Butte, Montana.

MPC has had a long-standing commitment to meet its utility obligation to serve the demands of its customers in a safe, reliable manner at the lowest possible cost as a result of prudent, long-term planning. This document displays a plan for future resource acquisition which comes as close as possible to meeting that criteria. In addition, this resource plan allows the resource planning process to address the uncertainty in the origin and cost of future resources acquisitions. The resource plan must be fluid enough to avoid making resource acquisition commitments too far in advance of predicted need, in order to maintain optimum flexibility in serving a dynamic market.

Load Forecast

Summary

MPC's Load Forecast and Resource Plan is developed around three economic and demographic growth scenarios; the Base Case, Low Case and High Case. In Graph 1, the three load growth scenarios are displayed. The base case scenario, which appears as the line, represents the most likely growth that MPC feels will occur, and is bounded by the high and low scenarios. The high scenario represents the optimistic forecast of economic and demographic growth and the low represents the pessimistic forecast.



Some major points of the Base Case scenario are outlined below:

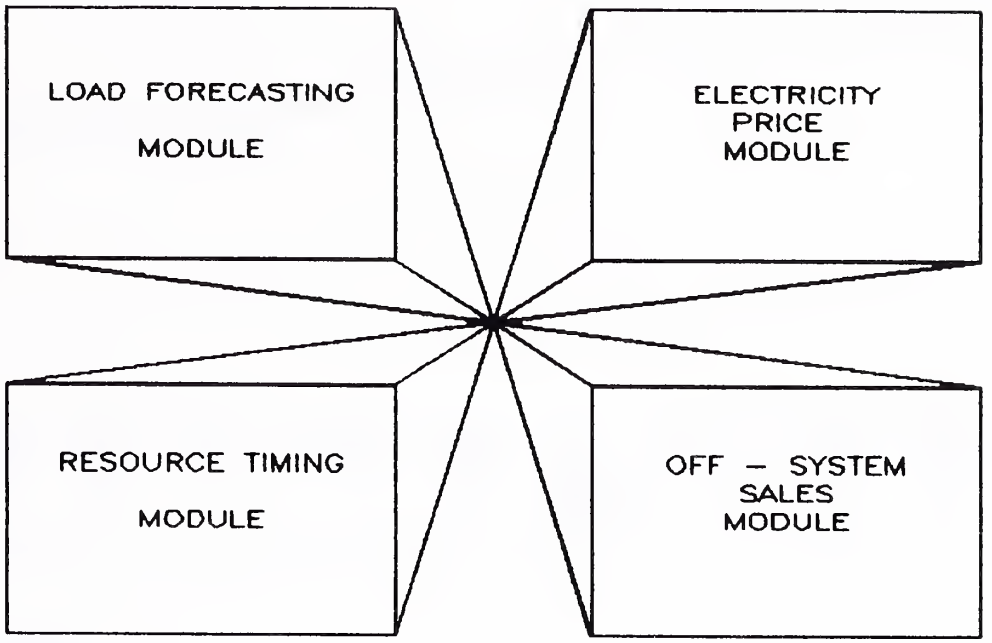
- Slow Economic Growth through 1990 with Moderate Growth Beyond 1990
- Population Growth : 0.8% Per Year
- Sales Growth, 1986-2010
  - Residential : 1.3% Per Year
  - Commercial : 1.7% Per Year
  - Industrial and Contract Industrial : 1.1% Per Year
  - Other Sector : 1.8% Per Year
- Energy Load Growth : 1.4% Per Year
- Peak Load Growth : 1.3% Per Year

Process Overview

Load forecasting is an attempt to quantify future consumer electricity requirements, taking into account the uncertainty associated with the future. MPC attempts to quantify its future consumer electricity requirements with the aid of an electricity forecast model. This model predicts how our customers' electricity consumption will change as a result of forecast changes in future economic and demographic conditions, electricity prices, energy supply and its costs, inflation, and government programs and regulations. MPC's forecasting model (while being a simplification of reality) is a system which "links" together these concepts. Graph 2 displays the four basic components of the model that provide the "link" by simulating the environment in which each component functions and passing the appropriate information to the other components in the forecasting model.

The Load Forecasting module develops the annual sales forecast of the Residential, Commercial and Industrial sectors by aggregate econometric modeling techniques; the Contract Industrial sector through consultation of each customer; and the Other sector through regression analysis and trend analysis. The Resource Timing module adds to the existing resources the future resources required to meet MPC's customers' demands. The Off-System Sales module estimates sale of surplus energy into an off-system market. The Electricity Pricing module matches the revenues and costs of the system to estimate the annual price changes to which MPC's customers would be exposed.

THE MONTANA POWER COMPANY
ELECTRICITY FORECAST MODEL
GRAPH 2



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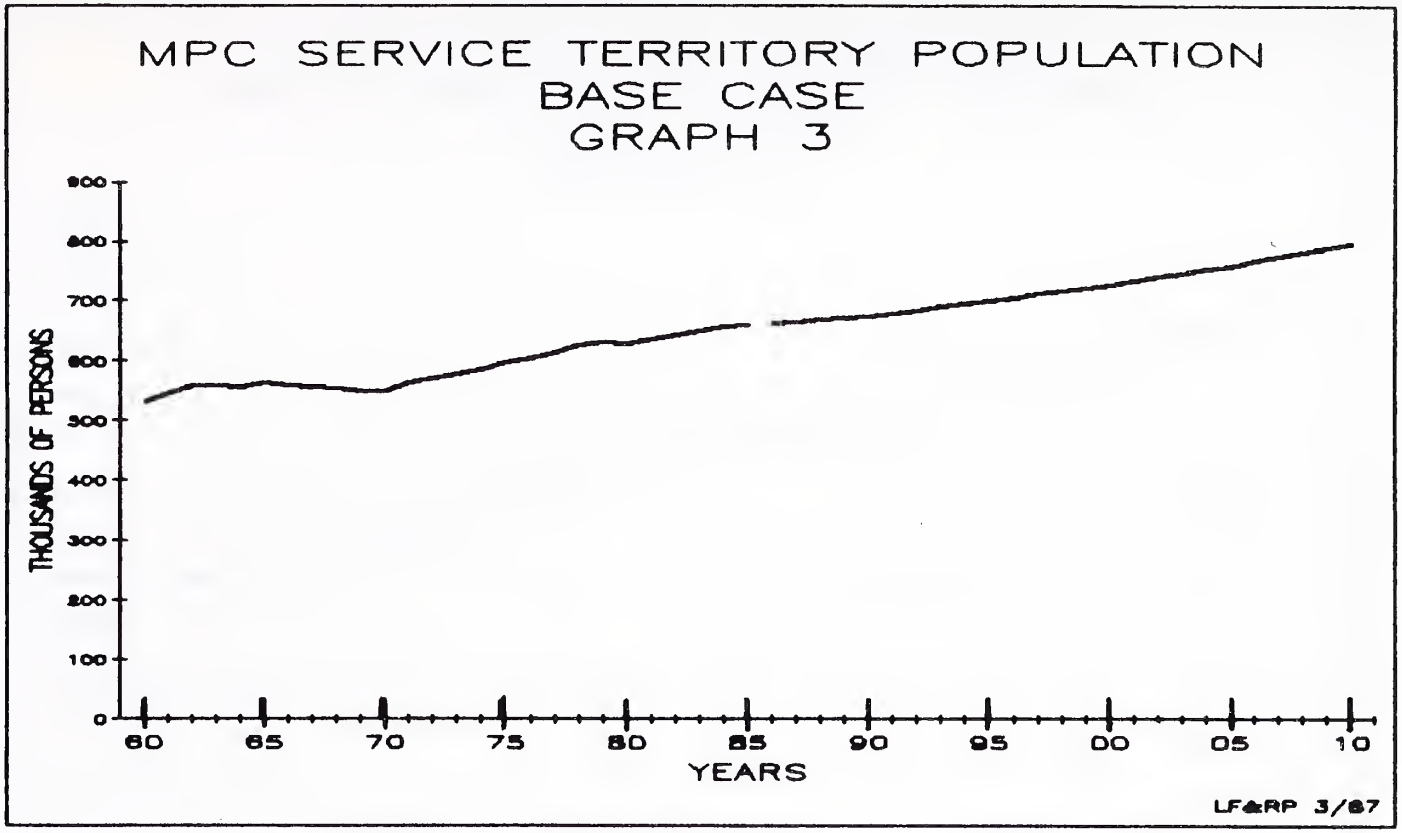
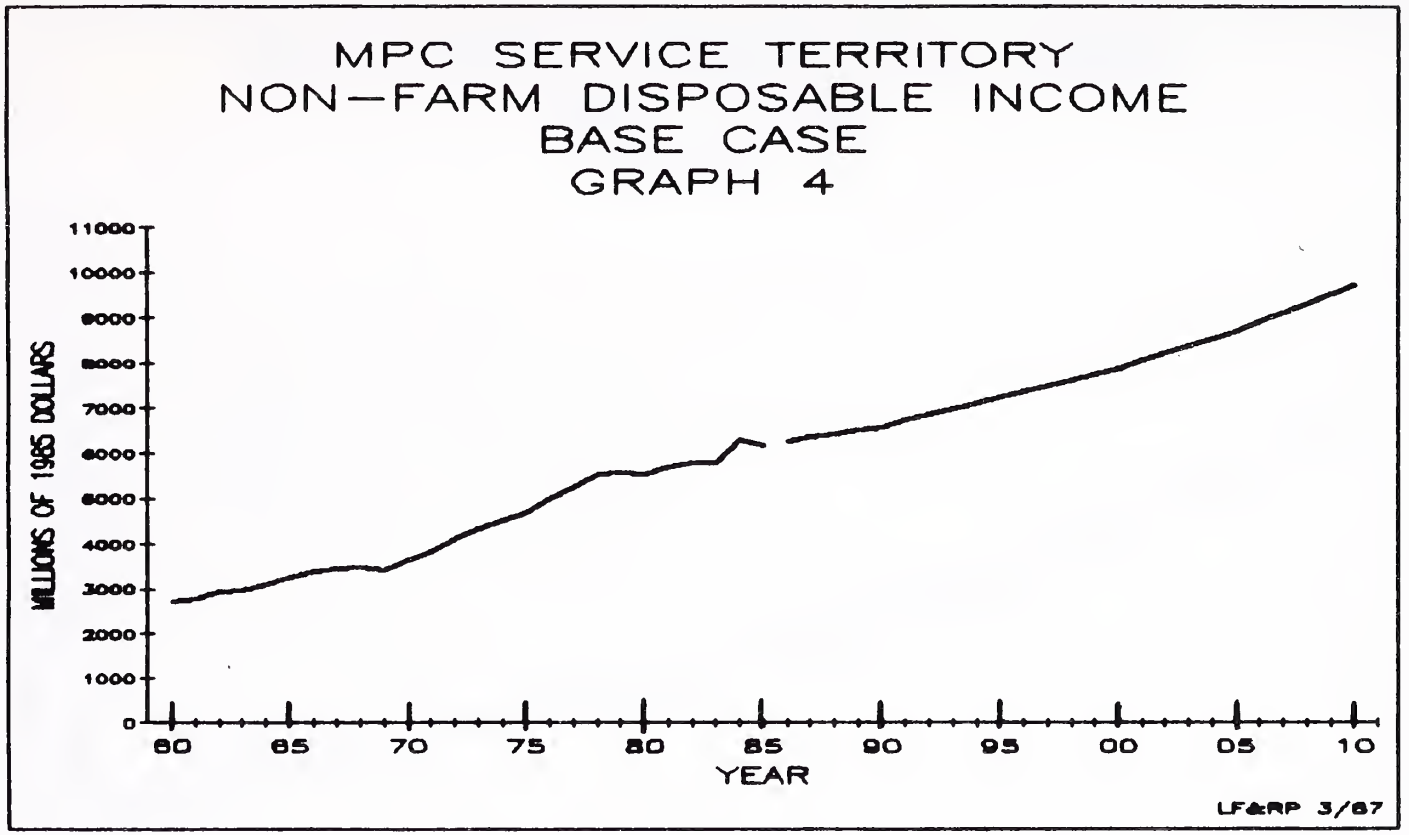
Forecast Assumptions

The demand for electricity depends on many factors; some factors such as temperature occur randomly while others such as population and employment are systematic and interrelated through time. The primary factors and assumptions for the Base Case scenario are graphically displayed in Graphs 3-7. Accompanying each graph is a brief discussion of the Base Case assumption.



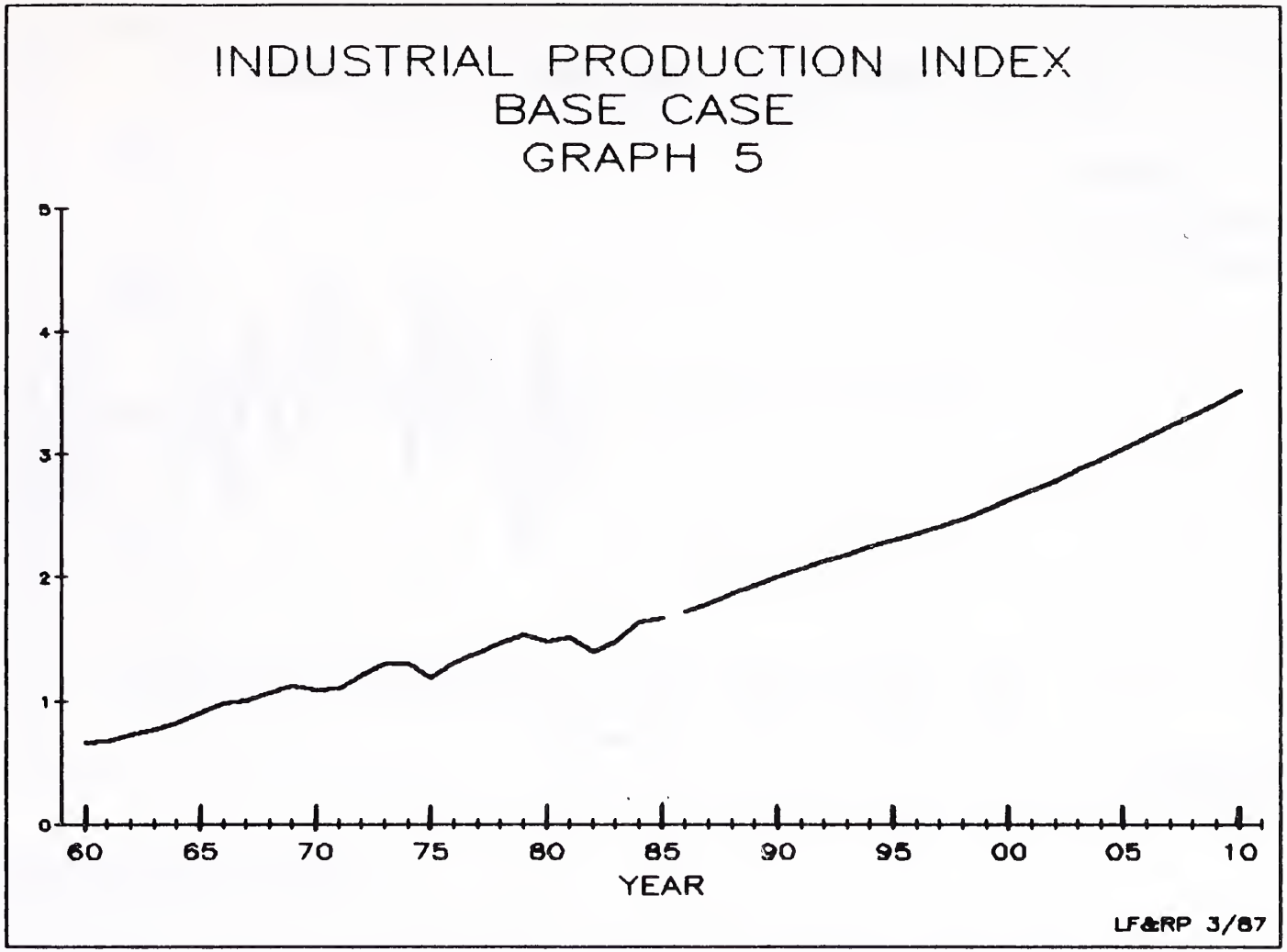
Population (Graph 3)

The initial step in developing the population forecast is to forecast the trends in the economic and demographic parameters that support the economy, which in turn sustain the population. The Base Case service territory population forecast is derived from the most likely set of economic and demographic parameters available at the time of development. Historically, MPC's service territory population grew from 1960-1985 at 0.86% per year. This historical growth can be divided into three periods: the 1960-70 period showed a very slow growth of 0.3%; the 1970-80 period was very robust with 1.3% growth; and the 1980-85 period shows Montana's population growth slowing down to 0.7%. The forecasted population growth rate of 0.8% from 1986-2010 is a result of the slow growth through 1991 of 0.5% per year picking up to 0.84% per year from 1991 through 2010. The 1986-2010 forecasted unemployment rate of 7% and employment growth rate of 0.8% support the population forecast.



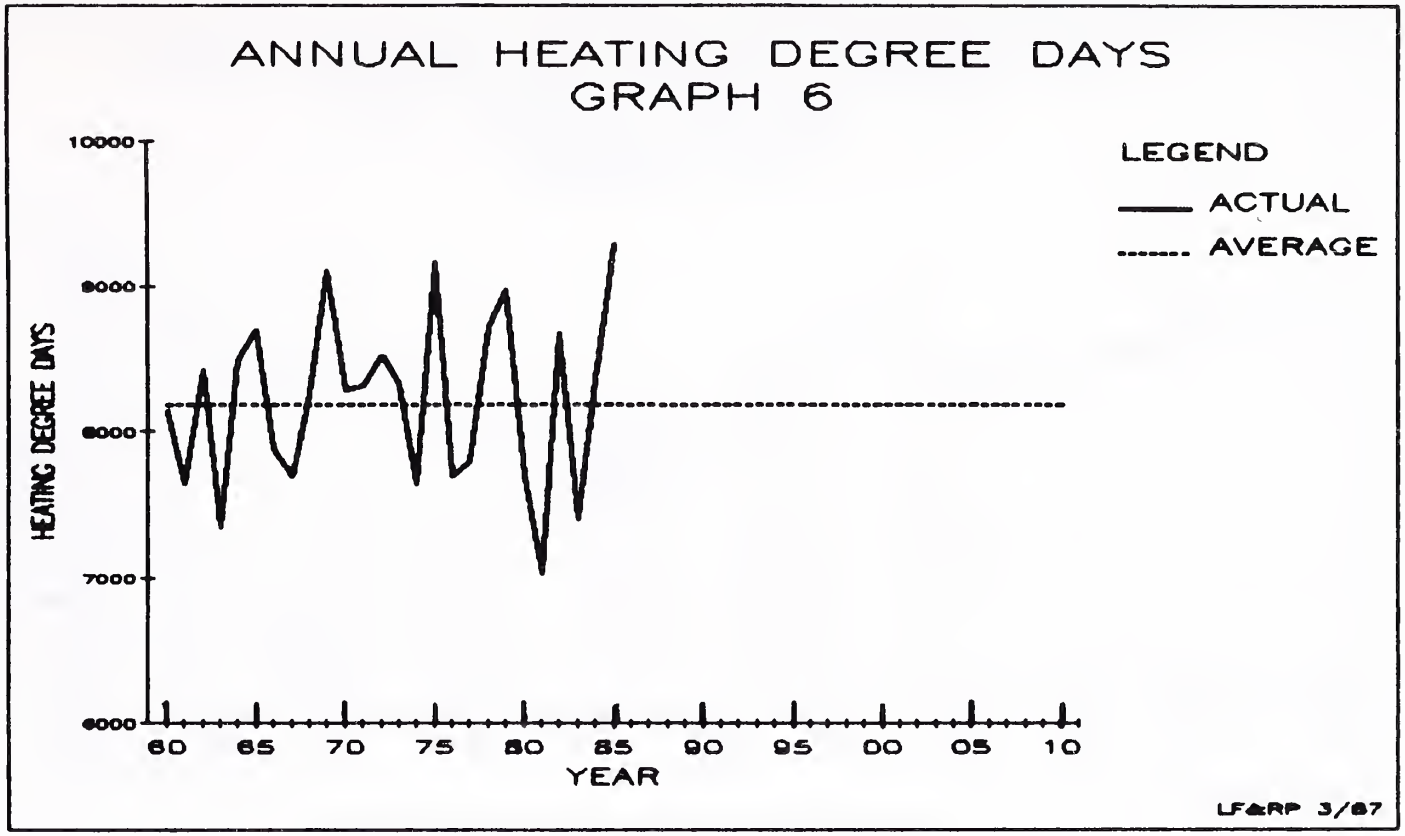
Non-Farm Disposable Income (Graph 4)

Historically, non-farm disposable income grew at 3.6% per year from 1960-1980 and in the Base Case forecast is expected to grow at 1.8% from 1986-2010. The reason for the divergence between the forecasted and historical growth rates is the transfer of high salaried jobs that historically existed in the mining sector to lower salaried jobs in the non-mining sectors. As Montana's employment base expands, employment growth in the mining sector is forecast to show good growth. In addition, the service sector's employment growth is expected to follow the national trend of solid growth. The result of pooling these two work forces together is that the growth in income is forecast to be slower than historical rates.



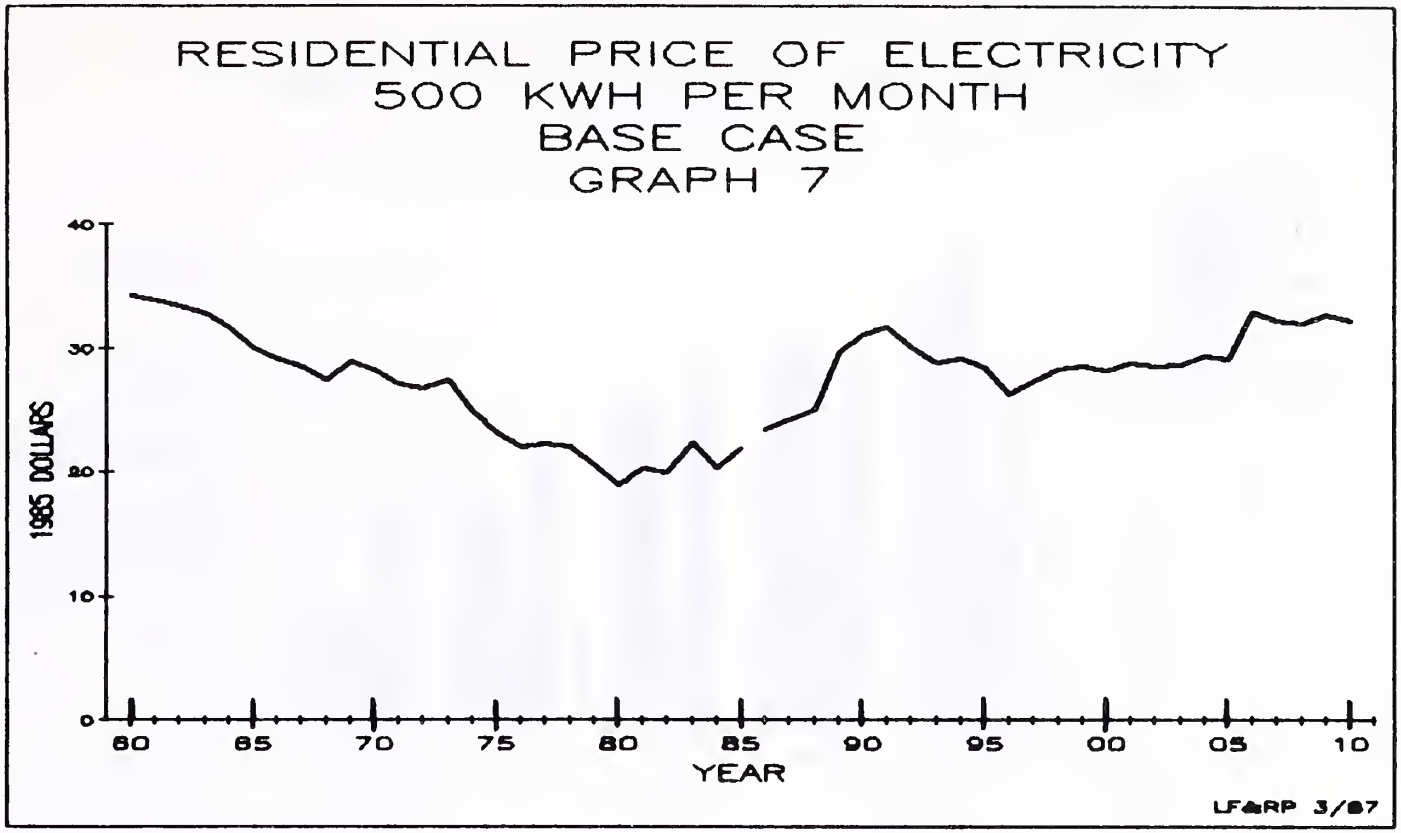
Industrial Production Index (Graph 5)

The Industrial Production Index is taken from Data Resources, Inc., and serves as the "link" to national industrial production levels. Industrial production grew at a 3.8% rate from 1960-1985 and is forecast to grow at a 3.1% in the Base Case forecast.



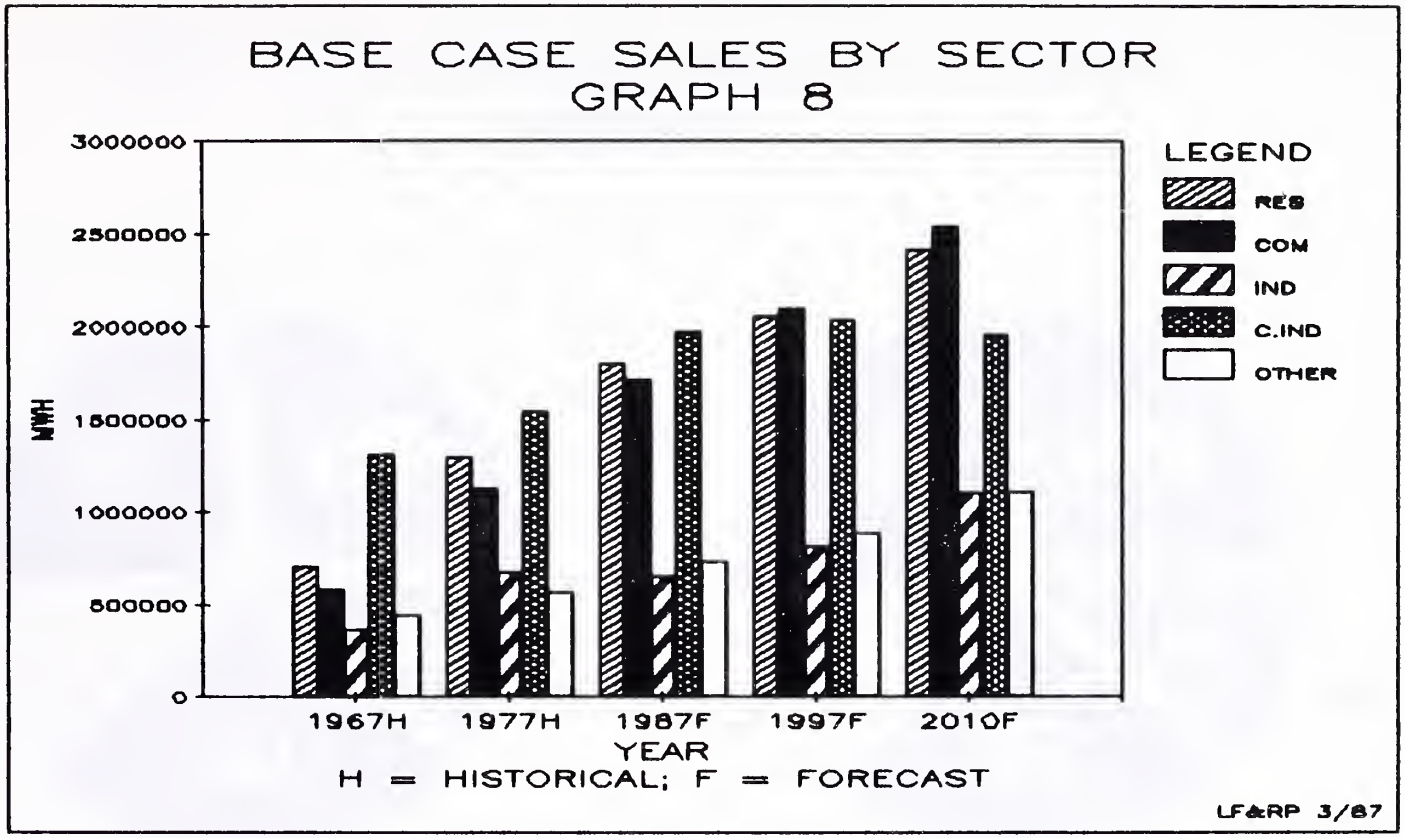
Heating Degree Days (Graph 6)

This variable is used in the forecast model to correct the sales in the temperature sensitive sectors for the effects of abnormal temperatures during the years. The historical average of 8217 heating degree days per year is used in developing the load forecast. By definition, one heating degree day occurs if the daily average ambient temperature is one degree less than some base temperature. The annual number of heating degree days is the sum of the daily heating degree days throughout the year. MPC uses 65° as the base temperature in developing the annual number of heating degree days. For example, if a day has an average temperature of 25°, then that day also has 40 heating degree days (65°-25°). The sum of daily heating degree days for each day of the year would equal the number of annual heating degree days.



Residential Price of Electricity, 500 kWh Per Month (Graph 7)

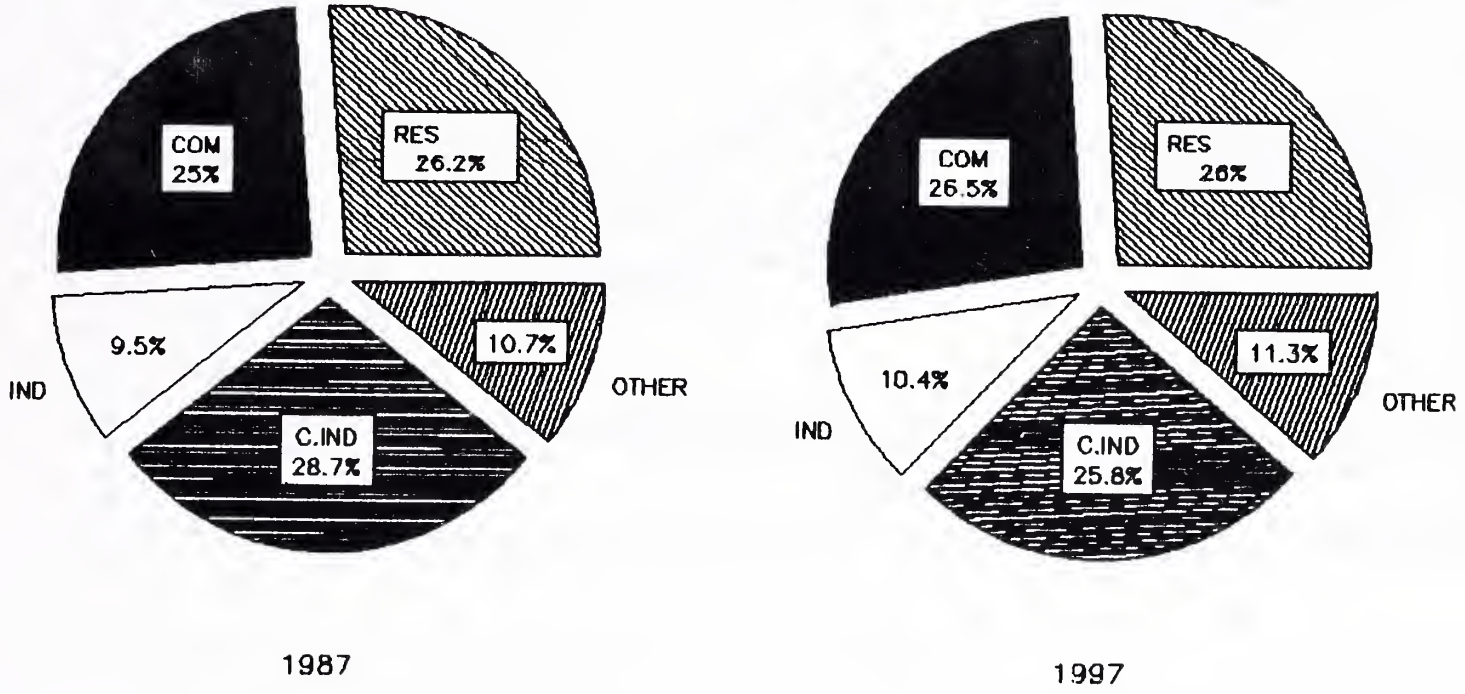
The change in the price of electricity was developed in the forecasting model by matching the revenues and costs associated with meeting the retail load. The revenues included are derived from the sale of electricity to MPC's retail customers at the expected rates and the revenues from the sale of surplus energy into the off-system market. The costs include those associated with the embedded rate base and generation expense plus the costs of any additional resources required to meet the expected load. The increase followed by a decrease in the residential price of 500 kWh at the beginning of the forecast is the result of the phase-in of the costs associated with Colstrip Unit #3. Beyond 1993, the price of electricity (in real terms) should be relatively stable with a modest increase near the end of the planning horizon. This forecast assumes that the change in electricity prices that the other sectors will incur will follow the same pattern as displayed in Graph 7.



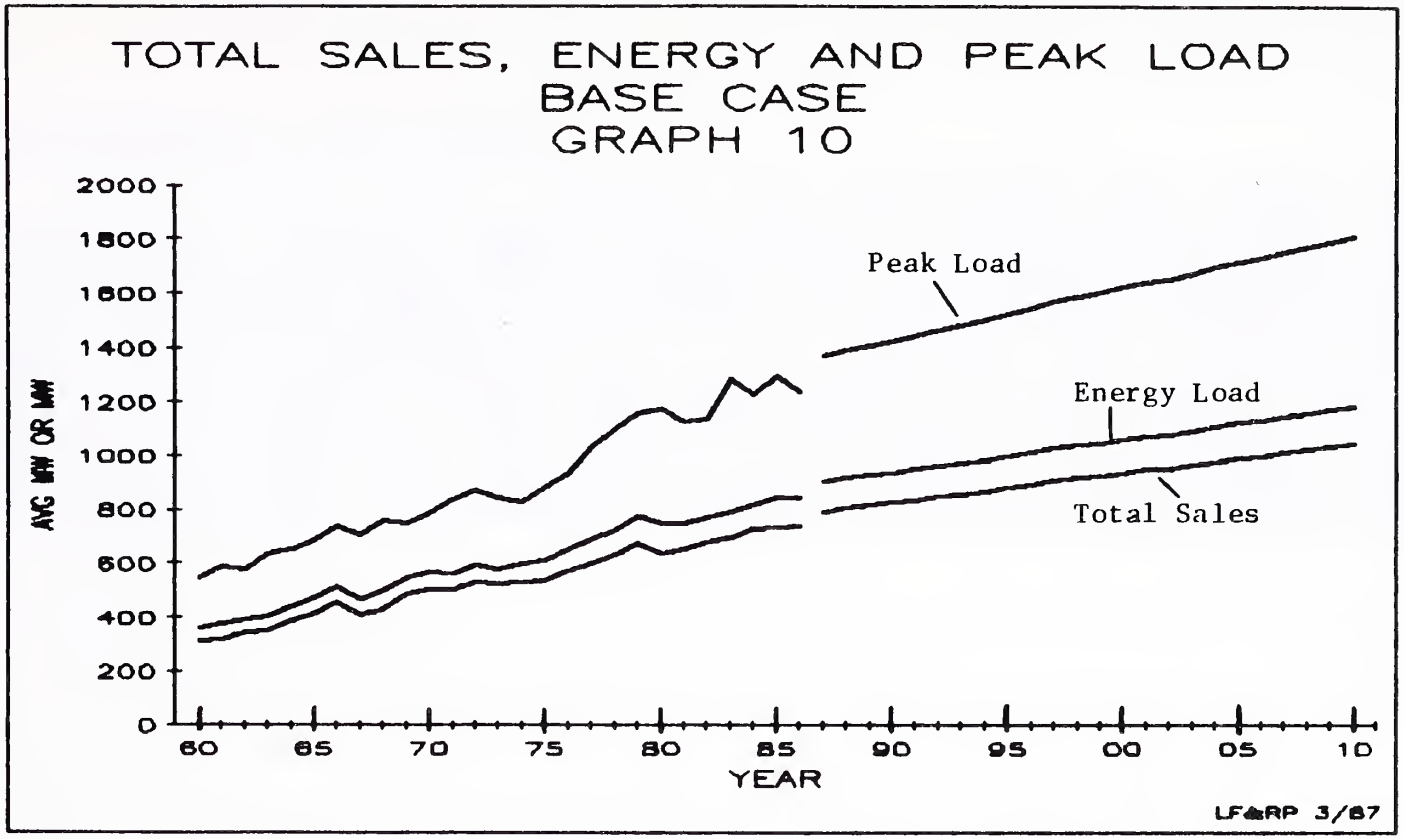
Forecast Results (Graph 8 and Graph 9)

Total Base Case sales from 1986-2010 is forecast to grow at 1.4% annually. This compares with the annual growth rate of 2.4% from 1970-1980. The slowdown in the growth of electricity sales is a function of many factors such as: the forecast slowdown in population and disposable income; and the increasing price of electricity. In Graph 8, the Residential (RES) and Commercial (COM) sectors sales are both forecast to exceed the Contract Industrial (C.IND) sales by 1997. The large increase in the Contract Industrial (C.IND) sector sales in the beginning of the forecast is due to the reclassification of two loads from the Industrial (IND) sector to the Contract Industrial sector; the resumption of the mining operations in Butte, and the start of the Montana Tunnels mining operations. It should be noted that all of the existing Contract Industrial customers remain as MPC's electric customers through the forecast.

BASE CASE PERCENT SALES BY SECTOR
GRAPH 9



In Graph 9, the percent of total sales for the Contract Industrial (C.IND) will decline from 28.7% in 1987 to 25.8% by 1997. The Industrial (IND) sector sales is forecast to show a slight increase from 9.5% of total sales to 10.4% by 1997. The combined Residential and Commercial (RES and COM) sector sales will show a net gain of 1.3% of total sales from 1987 to 1997.



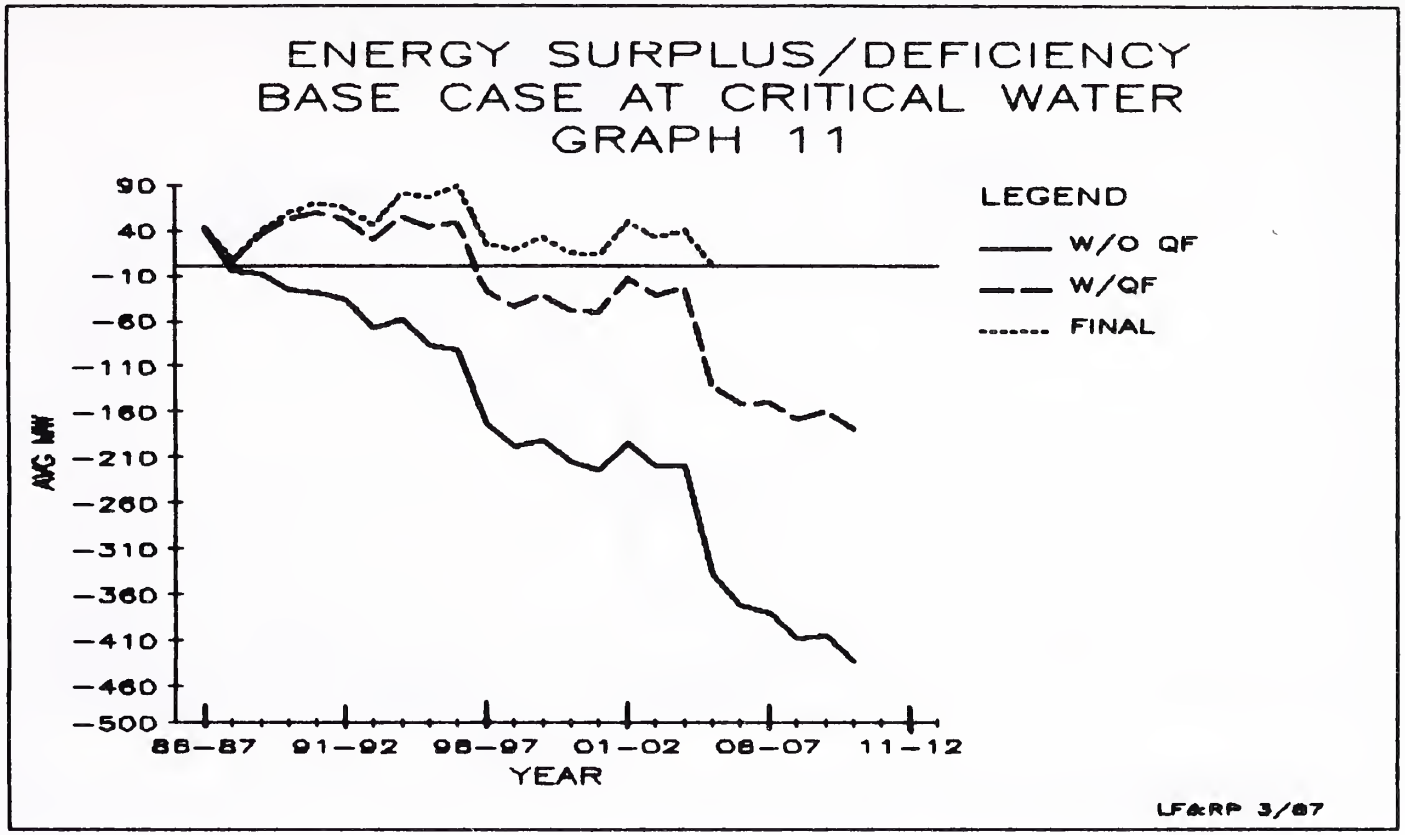
Total Sales, Energy and Peak Load (Graph 10)

Base Case energy load is forecast to grow at 1.4% annually from 1986-2009 while peak load is expected to grow at 1.3%. The increase in the beginning year of the forecast is primarily due to the start or resumption of mining operations around the State. System losses and unaccounted for energy, the difference between the Total Sales line and the Energy Load line, is forecast to decrease from 12% (as a percent of energy load) in 1987 to 11.7% by 2010. System Load Factor, the percentage that average annual Energy Load is of annual Peak Load, is forecast to remain constant at about 65%.

Resources

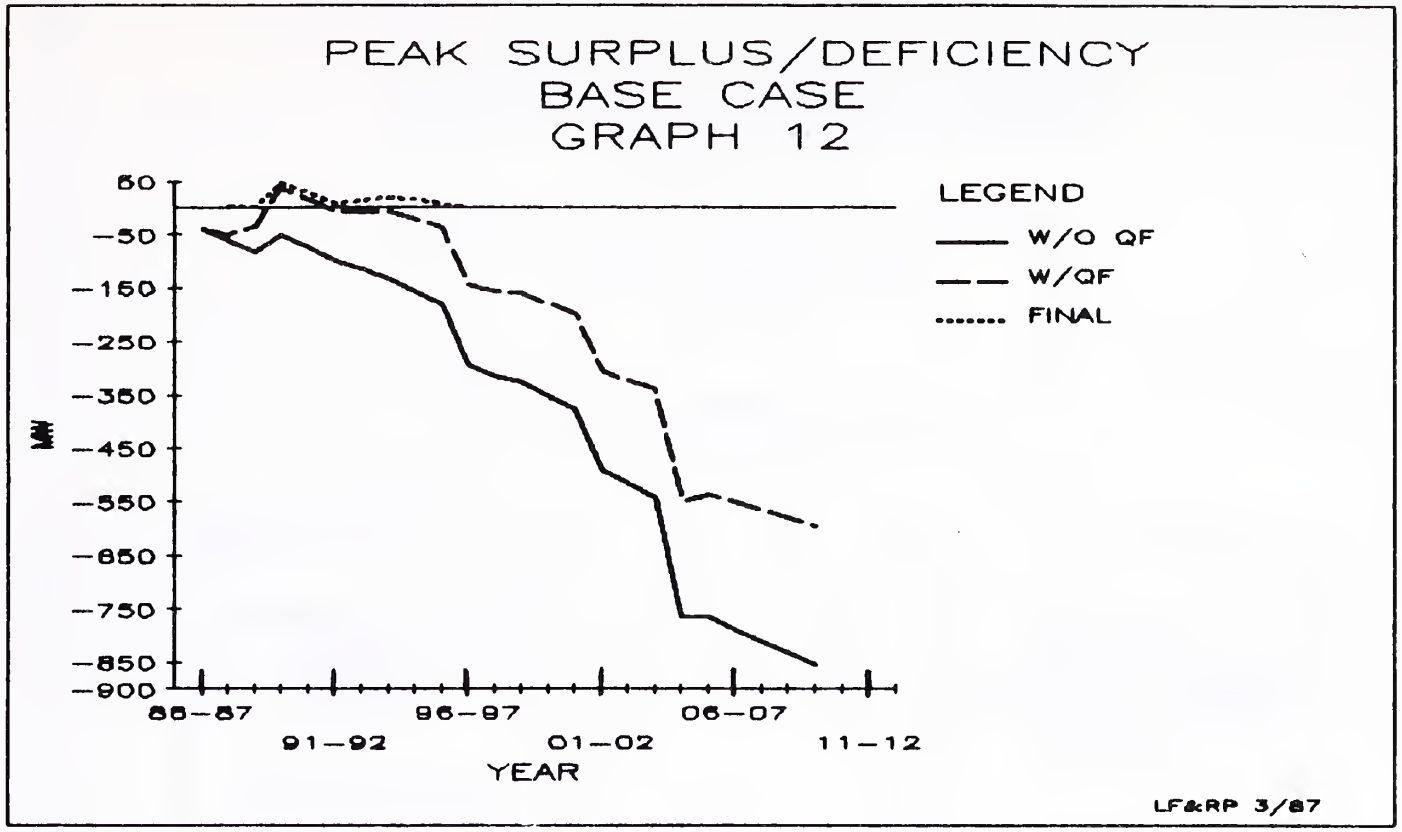
Base Case Surplus/Deficiency Summary

Graphs 11 and 12 display MPC's surpluses and deficiencies for energy and peak loads respectively. In both graphs, the horizontal line represents the load, and the area between the load line and the other lines represents the surplus or deficiency. The line labeled "W/O QF" includes MPC's existing thermal and hydro resources (at critical water), interruptible load, firm contracts, and refurbishment and life extension of the Frank Bird Plant. The line labeled "W/QF" adds the forecast QF resource to the "W/O QF" line. The line labeled "Final" adds to the "W/QF" line the tentative resources which include conservation and acquired purchases. This year's plan, while very similar to last year's resource plan, reflects modifications which serve to implement a least cost resource acquisition strategy.



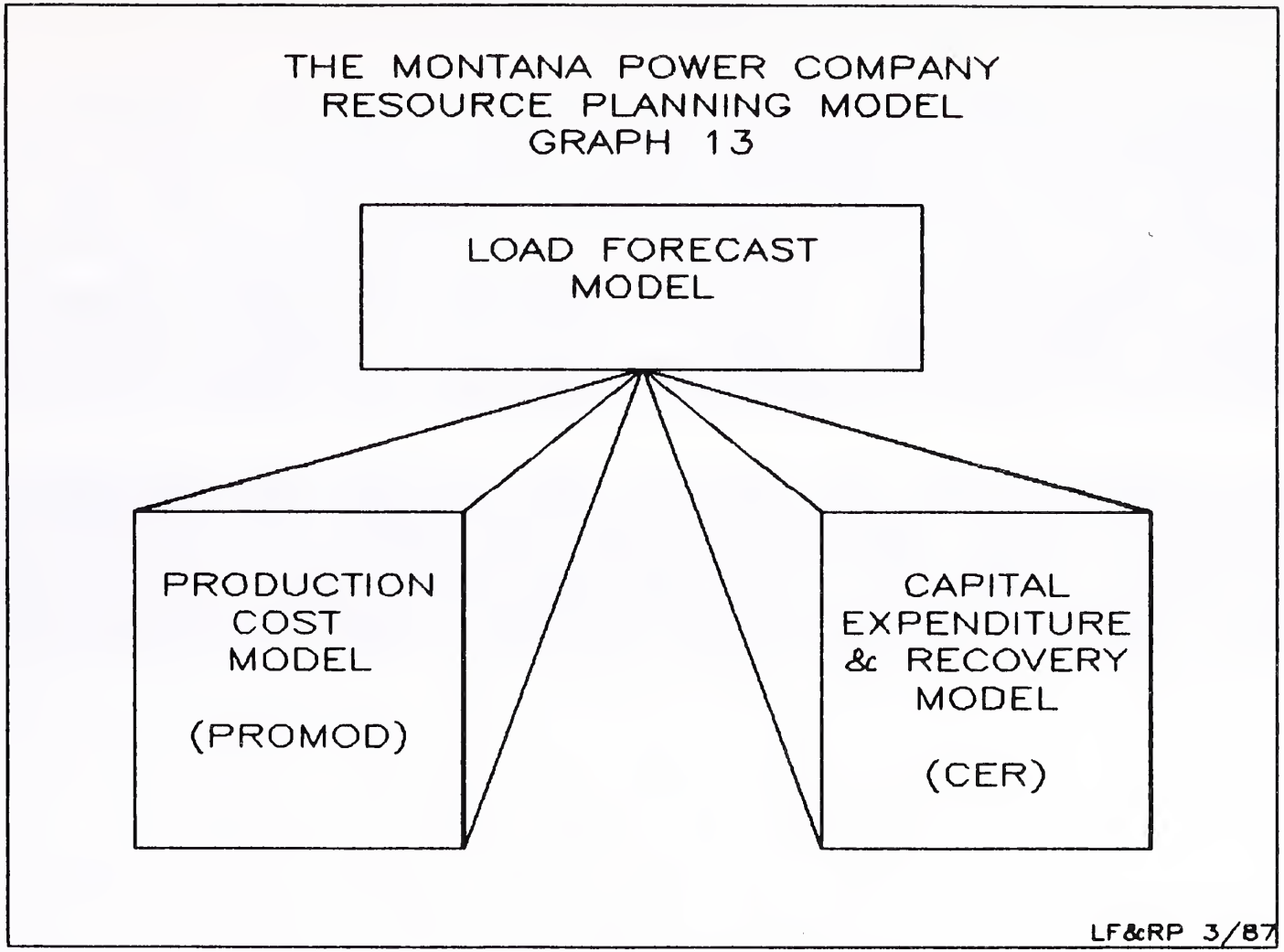
In Graph 11, energy surplus/deficiency, the following can be identified:

1. Without QF development, MPC will become energy deficient in the 1987-88 operating year.
2. If the QF resource develops as projected, MPC will become energy deficient in the 1996-97 operating year.
3. If no additional development beyond the existing QF contract amounts of 88 average MW, MPC will become energy deficient in 1992-93 operating year.
4. Three distinct resource changes can be identified:
   (a) In June 1996, MPC's WNP#1 contract for 65 average MW expires.
   (b) In June 2001, MPC's peak/energy exchange with BPA, a 29 average MW payback for receipt of 100 MW of capacity, expires.
   (c) The Corette Plant is assumed replaced at the end of its book life in 2004, a loss of 119 average MW.



In Graph 12, Peak Surplus/Deficiency, the following can be identified:

1. In 1987-88, MPC is deficient in capacity resource.
2. The Frank Bird Plant is scheduled to be refurbished for a 15-year life extension and will be returned to service in November 1989.
3. With the development of the existing contracted QF resource, MPC is projected to be surplus or in load/resource balance (without further peak resource acquisitions) in the 1989-90 and 1990-91 operating year only.
4. The peak deficiencies through the 1988-89 winter season will be met through firm capacity contracts.
5. Most of the peak resources required in addition to QF resources between 1989 and 1996 come from MPC's programmatic conservation resource acquisition program.



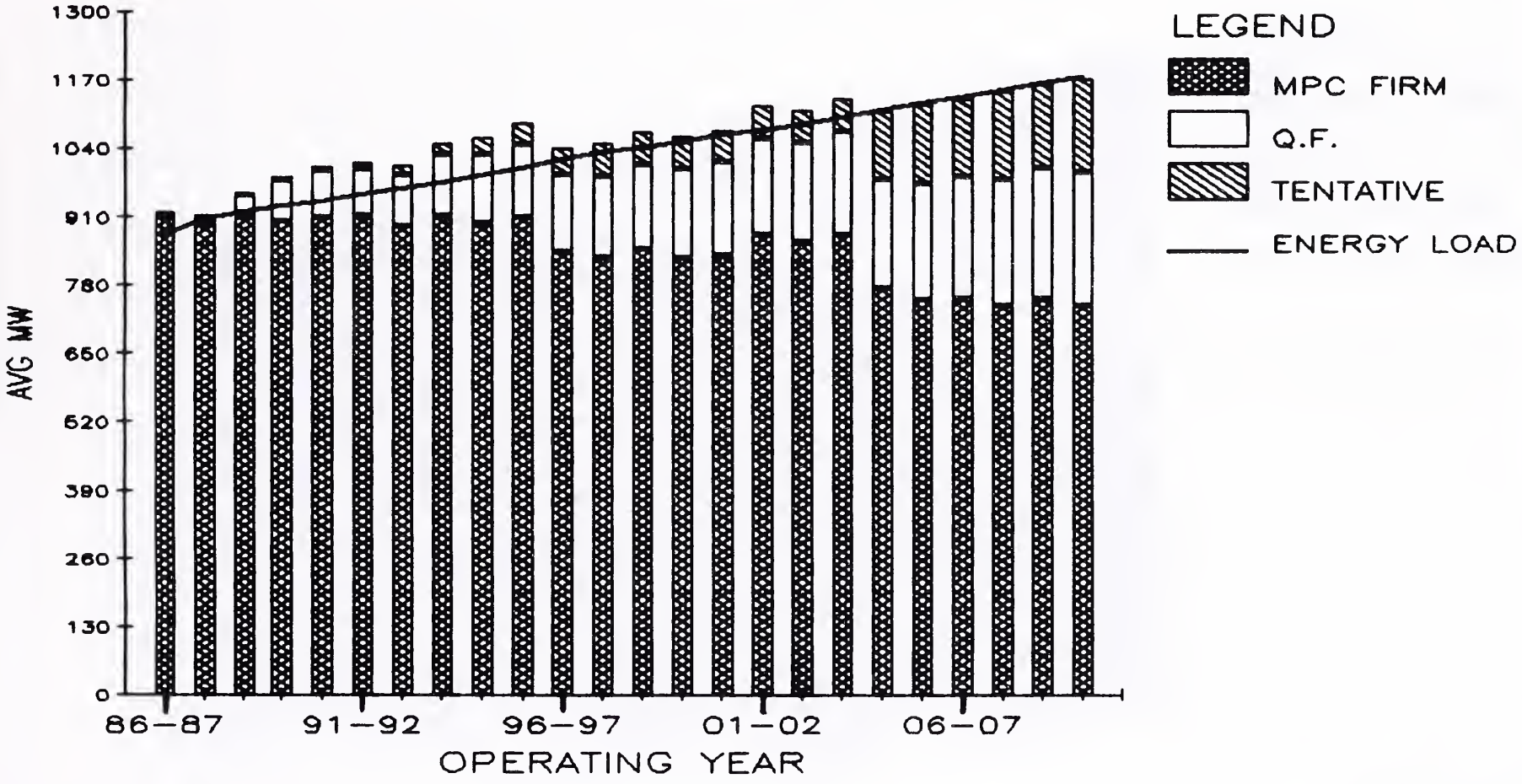
Process Overview

In the future, as in the past, the resource plan and planning process will change because of technology changes, public policy, public awareness of efficient use of energy resources, and MPC's commitment to provide reliable electric service to our customers at the lowest reasonable cost over the long term. MPC's resource planning process must be flexible enough to accommodate these changes.

In Graph 13, the basic components of the resource planning process are displayed. The first step in MPC's planning process is the development of the load forecast. The base case load growth scenario is the basis for MPC's resource plan presented herein. The next step in the process is the identification of known resources, including generation characteristics and costs that will be used in meeting the forecast load. The load forecast and a set of potential resources are then modeled in PROMOD, a computer program that simulates the economic dispatch of MPC's existing and potential electric generation resources through an algorithm that minimizes the production cost component of the electric system. This process produces a scenario of production costs that are passed to the capital expenditure and recovery model.

The capital expenditure and recovery model develops the electric utility system revenue requirements for the incremental resource additions. The set of potential resources that minimizes the present value of incremental system revenue requirements is then chosen to be included in the resource plan. This year's resource plan embraces this planning philosophy to the extent that the Frank Bird Plant has been identified as a least cost future long-term capacity resource available to MPC.

ENERGY LOAD AND RESOURCES
BASE CASE
GRAPH 14



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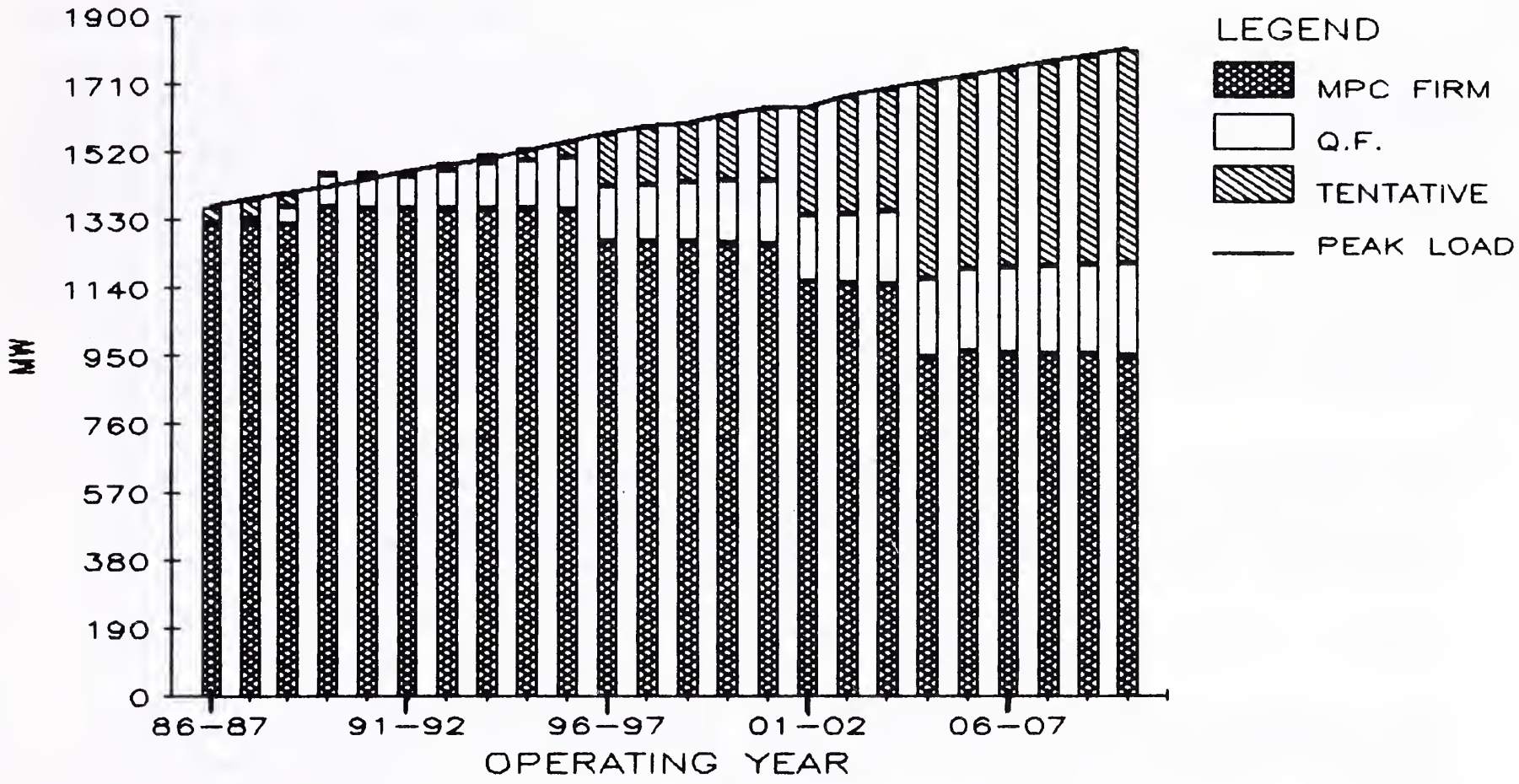
PEAK LOAD AND RESOURCES
BASE CASE
GRAPH 15



The Base Case Resource Plan

In Graphs 14 and 15, and Table 1, the combined production capability of MPC's existing resources are displayed. Currently MPC's hydro generaton supplies 38% of the energy and 35% of the peak capacity. MPC's thermal generation supplies 58% of the energy and 47% of the peak capacity.

Planned Resources - Base Case

In Graph 14, the planned resources are represented in the bottom portion of the horizontal bar that is labeled "MPC Firm" and includes MPC's existing hydro and thermal units, firm contracts, interruptible loads and the Frank Bird Plant. In Graph 14, MPC's energy surplus, using only "MPC Firm" resources will disappear by the operating year 1987-88. As shown in Graph 15, MPC is currently capacity resource deficient with "MPC Firm" resources.

Some of the salient features of the "MPC Firm" resources are:

- Colstrip Unit #4 is not included as a firm resource to serve MPC's electric customers future resource requirements. However, MPC's electric customers could provide a future market for Colstrip Unit #4 power.

- MPC's existing JE Corette Plant in Billings is at the end of its expected life in 2004. The replacement of the energy and capacity may be in the form of a life extension of the existing plant or replacement by another resource. In addition, the existing capacity and energy output of the plant continue to be limited by emission constraints to 151 MW and 127 average MW, respectively.

- The Milltown upgrade is included with a projected completion date of January 1988.

- The Frank Bird Plant life extension has undergone a complete engineering and economic evaluation. The Frank Bird Plant life extension study concluded that MPC should proceed with a 15-year life extension returning the plant to service in November 1989.

- MPC currently has two interruptible contracts for a total of 76 MW.

- The two firm inter-utility resource supply contracts that MPC has, WNP#1 and the Peak for Energy Exchange, will expire in 1996 and 2001, respectively.

PURPA Resources

In Graphs 14 and 15, the PURPA resources (qualifying facilities, "QF") are represented in the unhatched portion of the bar. The QF resource refers to independently owned Qualifying Facilities resources acquired by MPC under the Public Utilities Regulatory Policies Act (PURPA) of 1978. In Graph 14, with the anticipated QF development, MPC will be energy surplus until the operating year 1996-97. In Graph 15, MPC will be capacity surplus under the same QF resource development assumptions until 1991-92 except for the first two years of 1987-88 and 1988-89.

In the base case resource plan, it is anticipated that the QF resource will develop to the contracted level of 89 MW by 1990. It should be pointed out that the majority of the 89 MW currently under contract was signed prior to 1985. The forecast assumes that in 1992-93, when MPC goes energy deficient without any additional resource, the avoided cost rate that is set by the Montana Public Service Commission will rise to a level that will encourage QF resource development. This year's plan anticipates 55 MW of additional QF resource development between 1992 and 1996. To date, of the 89 MW of QF resources that are under existing contract, only a small portion has been developed.

Tentative Resources

In Graphs 14 and 15, the tentative resources are represented in the top portion of the bars. In Graph 14, MPC is slightly energy surplus, after addition of the tentative resources until, 2004. Beyond 2004, MPC is in load resource balance because of assumed acquisition of additional tentative resources. In Graph 15, MPC is in load resource balance because adequate amounts of capacity are obtained through the acquisition of tentative resources.

The two tentative resources in this year's plan are programmatic conservation resource and acquired energy and peak purchases.

- MPC has a strong commitment to the development of programmatic conservation resource which is provided by MPC's electric customers through participation in either or both of the following programs: MPC's proposed Electric Conservation Purchase Plan (ECPP) and MPC's street and area Lighting Electric Conservation Program. The quantities of this resource outlined in this plan were estimated by supply curves that were calibrated using the best information available at the time. MPC is currently collecting data that will provide MPC specific service territory conservation information. This information will allow MPC to more accurately calibrate the supply curves.

- Acquired energy and peak purchase represents an undefined set of resources. It is assumed that the resources in this category would cost no more than an equivalent amount of power purchased from BPA. The resources that may replace this undefined resource could include, but are not limited to, the development of MPC hydro upgrades at Thompson Falls, Ryan, and Rainbow; supply and demand side load management options; and perhaps regional hydro and thermal resources if innovative financing techniques and pricing schemes that would minimize acquisition costs of the development can be accomplished.

Table 1
MPC
1987-2010 Electric Resource Plan
Base Case

Resource Name	Type	MW Capacity	Average MW Energy[b]	Base Case Start	Base Case End[c]
Hydro, Existing	Hydro	518	337	N/A	-
Corette	Coal	151[a]	127[a]	N/A	Sep 2004
Colstrip Unit #1	Coal	165	135	N/A	-
Colstrip Unit #2	Coal	165	135	N/A	-
Colstrip Unit #3	Coal	210	172	N/A	-
Milltown Upgrade	Hydro	1	1	Jan 1988	-
Interruptible[h]	Contract	76	3	N/A	-
Bird	Gas/Oil	60	3	Nov 1989	Oct 2004
Programmatic Conservation	-	69	63	1986	-
Qualifying Facilities[d]	Cogen/Wind/ Hydro	260[e]	254[e]	Various	Various
Purchased Power[g]	Contract	410[e]	151[e]	As Req'd	Dec 2010[f]
BPA (PK/EN Exchange)	Contract	100	-29	N/A	Jun 2001
WNP #1	Contract	80	68	N/A	Jun 1996

[a]Reduced from previous reported values of 180 MW and 139 average MW due to emission constraints.
[b]Energy output at normal operation, critical water conditions for hydro units, before maintenance.
[c]Ending date pertains to contracts with expiring terms or to estimated useful life of the MPC resource.
[d]These are independently owned resources acquired by MPC under PURPA guidelines.
[e]This is the maximum amount for these prospective contracts in the Base Case Scenario.
[f]End of planning horizon.
[g]In the event purchased power is not available, hydro upgrades and development may eventually be considered as a partial replacement of purchased power and could include upgrades at Kerr, and Thompson Falls, Ryan and development at Hebgen.
[h]64 MW Stauffer Chemical Company + 12 MW Montana Resources, Inc.

Note: NA means Not Applicable because the resource is existing.

Table 2

BASE CASE INPUT VARIABLES, ACTUAL(A) AND FORECAST(F)

	1960 A	1970 A	1980 A	1986 F	1991 F	2001 F	2010 F
POPULATION (000'S)	531.3	549.2	627.5	660.9	677.5	732.3	794.9
INCOME (MILL. OF 85 $)	2709	3638	5512	6254	6715	8044	9703
IND. PROD. INDEX	0.661	1.078	1.47	1.714	2.07	2.711	3.527
ELECTRICITY PRICE(85 $)							
RESIDENTIAL(500KWH)	34.11	28.2	18.79	23.35	31.58	28.69	32.15
G.S.COMMERCIAL(2400KWH)	203.58	182.88	123.66	107	144.73	131.47	147.32
G.S.INDUSTRIAL(5000KWH)	184.41	188.79	103.53	193.74	262.06	238.06	266.76

BASE CASE INPUT VARIABLES COMPOUND ANNUAL GROWTH RATES(CAGR)

	60-70	70-80	60-80	86-91	91-01	01-10	86-10
POPULATION (000'S)	0.3%	1.3%	0.8%	0.5%	0.8%	0.9%	0.8%
INCOME (MILL. OF 85 $)	3.0%	4.2%	3.6%	1.4%	1.8%	2.1%	1.8%
IND. PROD. INDEX	5.0%	3.2%	4.1%	3.8%	2.7%	3.0%	3.1%
ELECTRICITY PRICE(85 $)							
RESIDENTIAL(500KWH)	-1.9%	-4.0%	-2.9%	6.2%	-1.0%	1.3%	1.3%
G.S.COMMERCIAL(2400KWH)	-1.1%	-3.8%	-2.5%	6.2%	-1.0%	1.3%	1.3%
G.S.INDUSTRIAL(5000KWH)	0.2%	-5.8%	-2.8%	6.2%	-1.0%	1.3%	1.3%

HIGH CASE INPUT VARIABLES FORECAST(F)

	1986 F	1991 F	2001 F	2010 F
POPULATION (000'S)	663.9	697.1	786.5	914
INCOME (MILL. OF 85 $)	6327	7154	9163	11829
IND. PROD. INDEX	1.71	2.07	2.711	3.527
ELECTRICITY PRICE(85 $)				
RESIDENTIAL(500KWH)	23.35	29.88	27.07	30.02
G.S.COMMERCIAL(2400KWH)	107	136.93	124.06	137.59
G.S.INDUSTRIAL(5000KWH)	193.74	247.93	224.62	249.12

HIGH CASE INPUT VARIABLES COMPOUND ANNUAL GROWTH RATES(CAGR)

	86-91	91-01	01-10	86-10
POPULATION (000'S)	1.0%	1.2%	1.7%	1.3%
INCOME (MILL. OF 85 $)	2.5%	2.5%	2.9%	2.6%
IND. PROD. INDEX	3.9%	2.7%	3.0%	3.1%
ELECTRICITY PRICE(85 $)				
RESIDENTIAL(500KWH)	5.1%	-1.0%	1.2%	1.1%
G.S.COMMERCIAL(2400KWH)	5.1%	-1.0%	1.2%	1.1%
G.S.INDUSTRIAL(5000KWH)	5.1%	-1.0%	1.2%	1.1%

LOW CASE INPUT VARIABLES FORECAST(F)

	1986 F	1991 F	2001 F	2010 F
POPULATION (000'S)	656.1	648.5	656.3	665.5
INCOME (MILL. OF 85 $)	6169	6214	6862	7751
IND. PROD. INDEX	1.714	2.07	2.711	3.527
ELECTRICITY PRICE(85 $)				
RESIDENTIAL(500KWH)	23.35	33.59	30.4	34.43
G.S.COMMERCIAL(2400KWH)	107	153.92	139.25	157.79
G.S.INDUSTRIAL(5000KWH)	193.74	278.69	252.21	285.7

LOW CASE INPUT VARIABLES COMPOUND ANNUAL GROWTH RATES(CAGR)

	86-91	91-01	01-10	86-10
POPULATION (000'S)	-0.2%	0.1%	0.2%	0.1%
INCOME (MILL. OF 85 $)	0.1%	1.0%	1.4%	1.0%
IND. PROD. INDEX	3.8%	2.7%	3.0%	3.1%
ELECTRICITY PRICE(85 $)				
RESIDENTIAL(500KWH)	7.5%	-1.0%	1.4%	1.6%
G.S.COMMERCIAL(2400KWH)	7.5%	-1.0%	1.4%	1.6%
G.S.INDUSTRIAL(5000KWH)	7.5%	-1.0%	1.4%	1.6%

ENERGY LOAD, PEAK LOAD AND SALES BY LARGE CLASS
1960-1986 ACTUAL, 1987-2010 BASE CASE FORECAST

	RESIDENTIAL		COMMERCIAL		INDUSTRIAL		CONTRACT		OTHER		RAILROAD		TOTAL SALES		ENERGY LOAD		PEAK LOAD *		PERCENT LOSS & UNACCOUNTED	ANNUAL LOAD
YEAR	MWH	YR CHNG	MWH	YR CHNG	MWH	YR CHNG	MWH	YR CHNG	MWH	YR CHNG	MWH	YR CHNG	MWH	YR CHNG	AVG MW	YR CHNG	MW	YR CHNG	FOR	FACTOR
1960	520148		368535		256292		1203821		283091		85276		2717163		359		545		13.8%	65.9%
1961	547422	5.2%	403506	9.5%	268753	4.9%	1169759	-2.8%	316943	12.0%	78899	-7.5%	2785282	2.5%	376	4.7%	585	7.3%	15.4%	64.3%
1962	582157	6.3%	427781	6.0%	281419	4.7%	1265505	8.2%	356644	12.5%	86794	10.0%	3000300	7.7%	392	4.3%	576	-1.5%	12.6%	68.1%
1963	597650	2.7%	451264	5.5%	292003	3.8%	1201127	-5.1%	410570	15.1%	83554	-3.7%	3036168	1.2%	399	1.8%	635	10.2%	13.1%	62.8%
1964	632082	5.8%	481896	6.8%	310470	6.3%	1429250	19.0%	419860	2.3%	70785	-15.3%	3344343	10.2%	438	9.8%	650	2.4%	13.1%	67.4%
1965	673483	6.5%	520797	8.1%	316174	1.8%	1556258	8.9%	450240	7.2%	81033	14.5%	3597985	7.6%	469	7.1%	683	5.1%	12.4%	68.7%
1966	695996	3.3%	553713	6.3%	373871	18.2%	1771400	13.8%	478889	6.4%	87476	8.0%	3961345	10.1%	510	8.7%	737	7.9%	11.3%	69.2%
1967	717091	3.0%	589851	6.5%	374839	0.3%	1317252	-25.6%	448000	-6.5%	81684	-6.6%	3528717	-10.9%	466	-8.6%	703	-4.6%	13.6%	66.3%
1968	764937	6.7%	643022	9.0%	387509	3.4%	1465285	11.2%	431798	-3.6%	69039	-15.5%	3761590	6.6%	495	6.2%	757	7.7%	13.5%	65.4%
1969	820698	7.3%	690395	7.4%	402059	3.8%	1856521	26.7%	432297	0.1%	56734	-17.8%	4258704	13.2%	542	9.5%	748	-1.2%	10.3%	72.5%
1970	850320	3.6%	740096	7.2%	418275	4.0%	1899701	2.3%	423403	-2.1%	72342	27.5%	4404137	3.4%	564	4.1%	782	4.5%	10.9%	72.1%
1971	912860	7.4%	796793	7.7%	494221	18.2%	1639328	-13.7%	446985	5.6%	79943	10.5%	4370130	-0.8%	561	-0.5%	834	6.6%	11.1%	67.3%
1972	984850	7.9%	856756	7.5%	565532	14.4%	1666499	1.7%	465900	4.2%	80593	0.8%	4620130	5.7%	589	5.0%	867	4.0%	10.7%	67.9%
1973	1016702	3.2%	916428	7.0%	604061	6.8%	1414329	-15.1%	499786	7.3%	51569	-36.0%	4502875	-2.5%	578	-1.9%	843	-2.8%	11.1%	68.6%
1974	1043594	2.6%	930212	1.5%	606698	0.4%	1525603	7.9%	505315	1.1%	22577	-56.2%	4633999	2.9%	599	3.6%	823	-2.4%	11.7%	72.8%
1975	1143940	9.6%	996751	7.2%	587023	-3.2%	1406861	-7.8%	532902	5.5%	0	-100.0%	4667477	0.7%	606	1.2%	880	6.9%	12.1%	68.9%
1976	1205322	5.4%	1060597	6.4%	674948	15.0%	1523939	8.3%	556346	4.4%			5021152	7.6%	650	7.3%	930	5.7%	12.1%	69.9%
1977	1299608	7.8%	1129770	6.5%	668734	-0.9%	1555070	2.0%	575076	3.4%			5228258	4.1%	687	5.7%	1026	10.3%	13.1%	67.0%
1978	1454858	11.9%	1227173	8.6%	673483	0.7%	1538519	-1.1%	631492	9.8%			5525525	5.7%	719	4.7%	1095	6.7%	12.3%	65.7%
1979	1560303	7.2%	1323282	7.8%	706090	4.8%	1635349	6.3%	672082	6.4%			5897106	6.7%	772	7.4%	1154	5.4%	12.8%	66.9%
1980	1538693	-1.4%	1363747	3.1%	662738	-6.1%	1381666	-15.5%	634226	-5.6%			5581070	-5.4%	745	-3.5%	1171	1.5%	14.7%	63.6%
1981	1547579	0.6%	1418839	4.0%	635931	-4.0%	1453401	5.2%	625399	-1.4%			5681149	1.8%	746	0.1%	1124	-4.0%	13.1%	66.4%
1982	1706174	10.2%	1507493	6.2%	624485	-1.8%	1439265	-1.0%	632554	1.1%			5909971	4.0%	766	2.7%	1135	1.0%	11.9%	67.5%
1983	1674886	-1.8%	1628567	8.0%	647391	3.7%	1468830	2.1%	649351	2.7%			6069025	2.7%	786	2.6%	1283	13.0%	11.9%	61.3%
1984	1824345	8.9%	1682008	3.3%	656510	1.4%	1455762	-0.9%	707934	9.0%			6326559	4.2%	816	3.8%	1221	-4.8%	11.7%	66.8%
1985	1888050	3.5	1741703	3.5%	704011	7.2%	1353468	-7.0%	728036	2.8%			6415268	1.4%	839	2.8%	1295	6.1%	12.7%	64.8%
1986	1766168	-6.5%	1709024	-1.9%	725869	3.1%	1559760	15.2%	696123	-4.4%			6456944	0.6%	839	0.0%	1233	-4.8%	12.1%	68.0%
1987	1809223	2.4%	1725680	1.0%	659386	-9.2%	1981173	27.0%	738445	6.1%			6913907	7.1%	897	6.9%	1365	6.4%	12.0%	65.7%
1988	1844168	1.9%	1757363	1.8%	679725	3.1%	2018442	1.9%	754887	2.2%			7054585	2.0%	914	1.9%	1387	1.6%	11.9%	65.9%
1989	1857840	0.7%	1790306	1.9%	672919	-1.0%	2038112	1.0%	772047	2.3%			7131224	1.1%	924	1.1%	1402	1.1%	11.9%	65.9%
1990	1865883	0.4%	1820277	1.7%	688486	2.3%	2041912	0.2%	788947	2.2%			7205505	1.0%	934	1.1%	1420	1.3%	11.9%	65.8%
1991	1880212	0.8%	1853987	1.9%	704141	2.3%	2050212	0.4%	802247	1.7%			7290799	1.2%	945	1.2%	1439	1.3%	11.9%	65.7%
1992	1902889	1.2%	1889075	1.9%	728530	3.5%	2057642	0.4%	818976	2.1%			7397112	1.5%	959	1.5%	1462	1.6%	11.9%	65.6%
1993	1931482	1.5%	1927582	2.0%	751679	3.2%	2015272	-2.1%	833742	1.8%			7459757	0.8%	966	0.7%	1478	1.1%	11.8%	65.4%
1994	1958752	1.4%	1967058	2.0%	766130	1.9%	2021792	0.3%	848689	1.8%			7562421	1.4%	980	1.4%	1498	1.4%	11.9%	65.4%
1995	1988848	1.5%	2008145	2.1%	784590	2.4%	2028072	0.3%	863641	1.8%			7673296	1.5%	994	1.4%	1519	1.4%	11.9%	65.4%
1996	2028478	2.0%	2055344	2.4%	810339	3.3%	2035702	0.4%	878774	1.8%			7808637	1.8%	1010	1.6%	1544	1.6%	11.7%	65.4%
1997	2062951	1.7%	2102919	2.3%	820871	1.3%	2041072	0.3%	893554	1.7%			7921367	1.4%	1026	1.6%	1567	1.5%	11.9%	65.5%
1998	2092430	1.4%	2147407	2.1%	833950	1.6%	2047672	0.3%	908515	1.7%			8029974	1.4%	1039	1.3%	1587	1.3%	11.8%	65.5%
1999	2120635	1.3%	2188686	1.9%	852901	2.3%	1969372	-3.8%	923480	1.6%			8055074	0.3%	1043	0.4%	1598	0.7%	11.8%	65.3%
2000	2150184	1.4%	2228226	1.8%	876871	2.8%	1977202	0.4%	938627	1.6%			8171110	1.4%	1058	1.4%	1619	1.3%	11.8%	65.3%
2001	2180175	1.4%	2267702	1.8%	898421	2.5%	1982772	0.3%	956231	1.9%			8285301	1.4%	1071	1.2%	1640	1.3%	11.7%	65.3%
2002	2211373	1.4%	2306015	1.7%	920065	2.4%	1903572	-4.0%	974017	1.9%			8315042	0.4%	1076	0.5%	1651	0.7%	11.8%	65.2%
2003	2242257	1.4%	2343214	1.6%	943578	2.6%	1910472	0.4%	991806	1.8%			8431327	1.4%	1091	1.4%	1672	1.3%	11.8%	65.3%
2004	2270545	1.3%	2378100	1.5%	965745	2.3%	1918502	0.4%	1009778	1.8%			8542670	1.3%	1106	1.4%	1694	1.3%	11.8%	65.3%
2005	2300255	1.3%	2412143	1.4%	991174	2.6%	1924352	0.3%	1027395	1.7%			8655319	1.3%	1120	1.3%	1714	1.2%	11.8%	65.3%
2006	2318067	0.8%	2441357	1.2%	999607	0.9%	1931372	0.4%	1045196	1.7%			8735599	0.9%	1130	0.9%	1730	0.9%	11.8%	65.3%
2007	2341158	1.0%	2467235	1.1%	1029052	2.9%	1938472	0.4%	1062999	1.7%			8838916	1.2%	1144	1.2%	1750	1.2%	11.8%	65.4%
2008	2366726	1.1%	2492283	1.0%	1054394	2.5%	1946702	0.4%	1080986	1.7%			8941091	1.2%	1157	1.1%	1770	1.1%	11.8%	65.4%
2009	2390792	1.0%	2516115	1.0%	1078789	2.3%	1952772	0.3%	1098618	1.6%			9037086	1.1%	1169	1.0%	1787	1.0%	11.8%	65.4%
2010	2418728	1.2%	2541317	1.0%	1111472	3.0%	1960072	0.4%	1116433	1.6%			9148022	1.2%	1182	1.1%	1807	1.1%	11.7%	65.4%
CAGR **																				
60-86	4.8%		6.1%		4.1%		1.0%		3.5%				3.4%		3.3%		3.2%			
81-86	2.7%		3.8%		2.7%		1.4%		2.2%				2.6%		2.4%		1.9%			
87-92	1.0%		1.8%		2.0%		0.8%		2.1%				1.4%		1.3%		1.4%			
87-10	1.3%		1.7%		2.3%		-0.0%		1.8%				1.2%		1.2%		1.2%			

* ASSUMES NORMAL PEAK WEATHER CONDITIONS.
** COMPOUND ANNUAL GROWTH RATE.

Table 4
The Montana Power Company
Historical Firm Energy and Peak Loads in AVG. MW and MW
1960-1986

		Calendar Year													Operating Year	
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann	Year	Opr
1960	ENERGY:	298	326	377	380	369	372	369	356	349	358	374	385	359		
	PEAK:	454	483	500	471	476	466	485	462	451	480	533	545	545		
	L.F.:	0.656	0.675	0.754	0.807	0.775	0.798	0.761	0.771	0.774	0.746	0.702	0.706	0.659		
1961	ENERGY:	378	373	375	374	361	372	361	375	351	377	399	419	376	1960-1961	369
	PEAK:	513	493	490	473	466	493	474	484	471	512	559	585	585		545
	L.F.:	0.737	0.757	0.765	0.791	0.775	0.755	0.762	0.775	0.745	0.736	0.714	0.716	0.643		
1962	ENERGY:	431	418	411	393	393	393	367	354	347	384	396	417	392	1961-1962	393
	PEAK:	576	540	524	493	502	497	494	453	464	520	552	559	576		585
	L.F.:	0.748	0.774	0.784	0.797	0.783	0.791	0.743	0.781	0.748	0.738	0.717	0.746	0.681		
1963	ENERGY:	457	418	408	395	376	364	372	376	369	392	416	454	399	1962-1963	390
	PEAK:	601	554	514	518	489	489	499	493	478	524	601	635	635		601
	L.F.:	0.760	0.755	0.794	0.763	0.769	0.744	0.745	0.763	0.772	0.748	0.692	0.715	0.628		
1964	ENERGY:	417	444	462	428	425	433	434	429	422	425	448	476	438	1963-1964	416
	PEAK:	602	588	575	559	549	547	540	554	543	567	615	650	650		635
	L.F.:	0.693	0.755	0.803	0.766	0.774	0.792	0.804	0.774	0.777	0.750	0.728	0.732	0.674		
1965	ENERGY:	468	469	470	459	444	451	452	453	467	470	488	512	469	1964-1965	450
	PEAK:	627	632	601	578	567	569	574	591	612	600	654	683	683		650
	L.F.:	0.746	0.742	0.782	0.794	0.783	0.793	0.787	0.766	0.763	0.783	0.746	0.750	0.687		
1966	ENERGY:	524	519	502	492	488	489	495	494	487	511	539	554	510	1965-1966	488
	PEAK:	689	675	654	621	617	609	622	625	614	660	737	728	737		689
	L.F.:	0.761	0.769	0.768	0.792	0.791	0.803	0.796	0.790	0.793	0.774	0.731	0.761	0.692		
1967	ENERGY:	555	558	557	526	507	511	438	390	376	370	389	424	466	1966-1967	525
	PEAK:	703	697	699	663	651	626	655	508	491	492	566	621	703		737
	L.F.:	0.789	0.801	0.797	0.793	0.779	0.816	0.669	0.768	0.766	0.752	0.687	0.683	0.663		
1968	ENERGY:	438	410	391	470	520	520	532	517	509	520	543	579	495	1967-1968	428
	PEAK:	589	552	529	595	644	649	663	640	626	650	704	757	757		655
	L.F.:	0.744	0.743	0.739	0.790	0.807	0.801	0.802	0.808	0.813	0.800	0.771	0.765	0.654		
1969	ENERGY:	602	583	560	527	520	518	520	521	520	529	543	567	542	1968-1969	543
	PEAK:	748	698	712	655	647	642	656	643	640	683	699	731	748		757
	L.F.:	0.805	0.835	0.787	0.805	0.804	0.807	0.793	0.810	0.813	0.775	0.777	0.776	0.725		
1970	ENERGY:	592	572	569	552	525	546	546	556	545	561	590	614	564	1969-1970	546
	PEAK:	753	710	697	672	666	698	679	694	657	708	767	782	782		753
	L.F.:	0.786	0.806	0.816	0.821	0.788	0.782	0.804	0.801	0.830	0.792	0.769	0.785	0.721		
1971	ENERGY:	620	603	595	569	562	577	452	469	446	555	614	664	561	1970-1971	578
	PEAK:	810	739	723	684	681	720	588	590	635	755	776	834	834		810
	L.F.:	0.765	0.816	0.823	0.832	0.825	0.801	0.769	0.795	0.702	0.735	0.791	0.796	0.673		
1972	ENERGY:	675	649	611	577	574	573	560	544	530	551	583	636	589	1971-1972	572
	PEAK:	867	811	751	697	701	699	698	682	659	716	767	843	867		867
	L.F.:	0.779	0.800	0.814	0.828	0.819	0.820	0.802	0.798	0.804	0.770	0.760	0.754	0.679		
1973	ENERGY:	631	605	568	556	546	562	577	571	544	558	606	605	578	1972-1973	573
	PEAK:	843	779	714	687	712	706	723	720	666	739	696	772	843		843
	L.F.:	0.749	0.777	0.796	0.809	0.767	0.796	0.798	0.793	0.817	0.755	0.871	0.784	0.686		
1974	ENERGY:	643	608	598	577	585	597	615	575	568	574	612	639	599	1973-1974	589
	PEAK:	823	740	739	695	728	760	770	745	685	725	774	794	823		823
	L.F.:	0.781	0.822	0.809	0.830	0.804	0.786	0.799	0.772	0.829	0.792	0.791	0.805	0.728		
1975	ENERGY:	649	659	611	585	567	571	597	577	560	599	630	665	606	1974-1975	602
	PEAK:	808	849	752	742	706	713	792	755	686	738	840	880	880		849
	L.F.:	0.803	0.776	0.813	0.788	0.803	0.801	0.754	0.764	0.816	0.812	0.750	0.756	0.689		

Table 4 continued
The Montana Power Company
Historical Firm Energy and Peak Load, in AVG. MW and MW
1960-1986

	Calendar Year													Operating Year	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann	Year	Opr
1976 ENERGY:	675	655	646	601	593	629	655	624	625	651	700	749	650	1975-1976	619
PEAK:	885	895	829	777	735	787	829	797	765	793	900	930	930		895
L.F.:	0.763	0.732	0.779	0.773	0.807	0.799	0.790	0.783	0.817	0.821	0.778	0.805	0.699		
1977 ENERGY:	782	703	691	660	648	676	589	653	649	648	742	799	687	1976-1977	680
PEAK:	960	856	847	816	794	849	755	788	768	851	985	1026	1026		960
L.F.:	0.815	0.821	0.816	0.809	0.816	0.796	0.780	0.829	0.845	0.761	0.753	0.779	0.670		
1978 ENERGY:	798	761	697	654	616	634	658	714	682	717	824	876	719	1977-1978	687
PEAK:	991	966	959	795	759	837	887	883	834	910	1034	1095	1095		1026
L.F.:	0.805	0.788	0.727	0.823	0.812	0.757	0.742	0.809	0.818	0.788	0.797	0.800	0.657		
1979 ENERGY:	934	850	783	688	689	710	742	727	725	750	824	837	772	1978-1979	760
PEAK:	1154	1064	952	842	870	882	951	948	845	913	1036	1056	1154		1154
L.F.:	0.809	0.799	0.822	0.817	0.792	0.805	0.780	0.767	0.858	0.821	0.795	0.793	0.669		
1980 ENERGY:	923	859	840	729	681	681	669	663	655	682	736	818	745	1979-1980	777
PEAK:	1171	1109	1089	925	871	878	876	860	777	868	932	1081	1171		1171
L.F.:	0.788	0.775	0.771	0.788	0.782	0.776	0.764	0.771	0.843	0.786	0.790	0.757	0.636		
1981 ENERGY:	776	806	771	715	674	682	746	741	716	738	772	822	746	1980-1981	721
PEAK:	960	1124	916	897	875	895	950	920	884	943	987	1051	1124		1124
L.F.:	0.808	0.717	0.842	0.797	0.770	0.762	0.785	0.805	0.810	0.783	0.782	0.782	0.664		
1982 ENERGY:	887	831	774	720	673	678	689	720	703	768	860	892	766	1981-1982	758
PEAK:	1135	1114	950	922	859	871	922	933	870	950	1077	1129	1135		1135
L.F.:	0.781	0.746	0.815	0.781	0.783	0.778	0.747	0.772	0.808	0.808	0.799	0.790	0.675		
1983 ENERGY:	839	803	801	750	747	776	728	761	721	740	792	974	786	1982-1983	779
PEAK:	1038	1038	954	925	898	978	939	978	901	884	1093	1283	1283		1129
L.F.:	0.808	0.774	0.840	0.811	0.832	0.793	0.775	0.778	0.800	0.837	0.725	0.759	0.613		
1984 ENERGY:	871	811	795	762	737	770	812	805	767	824	873	966	816	1983-1984	789
PEAK:	1221	1001	975	972	914	1028	1019	1013	1020	1083	1116	1221	1221		1283
L.F.:	0.713	0.810	0.815	0.784	0.806	0.749	0.797	0.795	0.752	0.761	0.782	0.791	0.668		
1985 ENERGY:	950	931	842	735	755	758	852	772	779	805	953	939	839	1984-1985	835
PEAK:	1249	1295	1136	909	962	1008	1123	1004	986	1101	1272	1289	1295		1295
L.F.:	0.761	0.719	0.741	0.809	0.785	0.752	0.759	0.769	0.790	0.731	0.749	0.728	0.648		
1986 ENERGY:	902	919	787	739	756	793	832	843	807	820	923	948	839	1985-1986	833
PEAK:	1134	1170	971	951	990	1061	1033	1078	972	1019	1233	1216	1233		1289
L.F.:	0.795	0.785	0.811	0.777	0.764	0.747	0.805	0.782	0.830	0.805	0.749	0.780	0.680		

Table 5
The Montana Power Company
Forecast of Firm Energy and Peak Loads Estimates, in Avg. MW and MW
1987-2010, Base Case

	Calendar Year													Operating Year	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann	Year	Opr
1987 ENERGY:	1057	966	891	819	788	820	871	875	841	878	949	1009	897		
PEAK:	1365	1234	1108	1023	992	1064	1139	1111	1047	1127	1211	1286	1365		
L.F.:	0.774	0.783	0.804	0.801	0.794	0.771	0.765	0.788	0.803	0.779	0.784	0.785	0.657		
1988 ENERGY:	1079	989	909	830	798	831	889	894	861	898	969	1031	914	1987-1988	905
PEAK:	1387	1261	1130	1037	1004	1079	1165	1135	1072	1153	1235	1313	1387		1387
L.F.:	0.778	0.784	0.804	0.800	0.795	0.770	0.763	0.788	0.803	0.779	0.785	0.785	0.659		
1989 ENERGY:	1091	1001	918	836	804	837	898	904	870	908	979	1042	924	1988-1989	919
PEAK:	1402	1276	1142	1044	1012	1088	1177	1148	1083	1166	1247	1326	1402		1402
L.F.:	0.778	0.784	0.804	0.801	0.794	0.769	0.763	0.787	0.803	0.779	0.785	0.786	0.659		
1990 ENERGY:	1103	1012	928	844	811	845	908	914	880	918	990	1055	934	1989-1990	929
PEAK:	1420	1289	1154	1054	1021	1099	1191	1160	1095	1179	1260	1342	1420		1420
L.F.:	0.777	0.785	0.804	0.801	0.794	0.769	0.762	0.788	0.804	0.779	0.786	0.786	0.658		
1991 ENERGY:	1117	1025	939	853	820	853	919	925	890	929	1002	1068	945	1990-1991	939
PEAK:	1439	1304	1168	1065	1032	1110	1207	1174	1107	1193	1275	1358	1439		1439
L.F.:	0.776	0.786	0.804	0.801	0.795	0.768	0.761	0.788	0.804	0.779	0.786	0.786	0.657		
1992 ENERGY:	1134	1042	953	865	831	865	934	940	905	944	1017	1086	959	1991-1992	952
PEAK:	1462	1325	1185	1080	1046	1127	1228	1193	1125	1212	1293	1380	1462		1462
L.F.:	0.776	0.786	0.804	0.801	0.794	0.768	0.761	0.788	0.804	0.779	0.787	0.787	0.656		
1993 ENERGY:	1144	1050	960	870	836	870	941	948	912	952	1025	1095	966	1992-1993	963
PEAK:	1478	1335	1194	1087	1052	1134	1238	1204	1134	1222	1302	1391	1478		1478
L.F.:	0.774	0.787	0.804	0.800	0.795	0.767	0.760	0.787	0.804	0.779	0.787	0.787	0.654		
1994 ENERGY:	1160	1065	973	881	846	881	954	961	924	965	1039	1112	980	1993-1994	973
PEAK:	1498	1353	1210	1100	1065	1150	1256	1220	1148	1239	1319	1412	1498		1498
L.F.:	0.774	0.787	0.804	0.801	0.794	0.766	0.760	0.788	0.805	0.779	0.788	0.788	0.654		
1995 ENERGY:	1177	1081	987	893	856	892	967	975	938	979	1054	1129	994	1994-1995	987
PEAK:	1519	1372	1227	1115	1077	1166	1274	1238	1166	1257	1337	1433	1519		1519
L.F.:	0.775	0.788	0.804	0.801	0.795	0.765	0.759	0.788	0.804	0.779	0.788	0.788	0.654		
1996 ENERGY:	1198	1100	1003	906	869	905	984	992	954	996	1072	1150	1010	1995-1996	1002
PEAK:	1544	1395	1247	1131	1094	1184	1298	1259	1185	1279	1359	1458	1544		1544
L.F.:	0.776	0.789	0.804	0.801	0.794	0.764	0.758	0.788	0.805	0.779	0.789	0.789	0.654		
1997 ENERGY:	1217	1118	1018	918	880	917	999	1007	969	1012	1088	1169	1026	1996-1997	1018
PEAK:	1567	1416	1266	1146	1108	1201	1319	1278	1203	1299	1378	1482	1567		1567
L.F.:	0.777	0.790	0.804	0.801	0.794	0.764	0.757	0.788	0.805	0.779	0.790	0.789	0.655		
1998 ENERGY:	1234	1133	1031	928	889	927	1012	1021	982	1025	1102	1186	1039	1997-1998	1032
PEAK:	1587	1434	1282	1159	1119	1215	1337	1296	1219	1316	1395	1502	1587		1587
L.F.:	0.778	0.790	0.804	0.801	0.794	0.763	0.757	0.788	0.806	0.779	0.790	0.790	0.655		
1999 ENERGY:	1238	1139	1035	930	891	929	1016	1025	986	1030	1107	1190	1043	1998-1999	1041
PEAK:	1598	1441	1287	1161	1121	1218	1343	1301	1224	1322	1401	1507	1598		1598
L.F.:	0.775	0.790	0.804	0.801	0.795	0.763	0.757	0.788	0.806	0.779	0.790	0.790	0.653		
2000 ENERGY:	1257	1155	1050	943	904	942	1030	1040	1001	1045	1122	1208	1058	1999-2000	1050
PEAK:	1619	1461	1306	1178	1138	1236	1363	1320	1242	1342	1419	1529	1619		1619
L.F.:	0.776	0.791	0.804	0.801	0.794	0.762	0.756	0.788	0.806	0.779	0.791	0.790	0.653		

Table 5 continued
The Montana Power Company
Forecast of Firm Energy and Peak Loads Estimates, in Avg. MW and MW
1987-2010, Base Case

		Calendar Year													Operating Year	
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann	Year	Opr
2001	ENERGY:	1274	1171	1063	954	914	953	1044	1054	1014	1059	1137	1225	1071	2000-2001	1065
	PEAK:	1640	1480	1322	1191	1150	1252	1382	1338	1258	1360	1437	1550	1640		1640
	L.F.:	0.777	0.791	0.804	0.801	0.795	0.761	0.755	0.788	0.806	0.779	0.791	0.790	0.653		
2002	ENERGY:	1279	1177	1067	957	916	955	1049	1059	1019	1063	1142	1230	1076	2001-2002	1074
	PEAK:	1651	1487	1327	1195	1153	1255	1389	1345	1264	1365	1443	1556	1651		1651
	L.F.:	0.775	0.792	0.804	0.801	0.794	0.761	0.755	0.787	0.806	0.779	0.791	0.790	0.652		
2003	ENERGY:	1297	1193	1082	970	928	968	1063	1073	1033	1078	1158	1249	1091	2002-2003	1083
	PEAK:	1672	1506	1345	1211	1168	1273	1409	1362	1281	1384	1462	1580	1672		1672
	L.F.:	0.776	0.792	0.804	0.801	0.795	0.760	0.754	0.788	0.806	0.779	0.792	0.791	0.653		
2004	ENERGY:	1316	1210	1097	981	939	979	1078	1089	1047	1094	1174	1268	1106	2003-2004	1098
	PEAK:	1694	1527	1364	1225	1182	1289	1430	1383	1299	1405	1481	1603	1694		1694
	L.F.:	0.777	0.792	0.804	0.801	0.794	0.760	0.754	0.787	0.806	0.779	0.793	0.791	0.653		
2005	ENERGY:	1333	1227	1110	993	949	990	1092	1103	1061	1108	1189	1285	1120	2004-2005	1113
	PEAK:	1714	1547	1380	1240	1194	1304	1450	1400	1316	1423	1499	1624	1714		1714
	L.F.:	0.778	0.793	0.804	0.801	0.795	0.759	0.753	0.788	0.806	0.779	0.793	0.791	0.653		
2006	ENERGY:	1346	1240	1121	1001	957	999	1103	1114	1072	1119	1201	1297	1130	2005-2006	1125
	PEAK:	1730	1563	1394	1250	1204	1317	1465	1414	1329	1437	1514	1638	1730		1730
	L.F.:	0.778	0.793	0.804	0.801	0.795	0.759	0.753	0.788	0.807	0.779	0.793	0.792	0.653		
2007	ENERGY:	1363	1254	1134	1012	967	1009	1115	1127	1085	1132	1215	1315	1144	2006-2007	1137
	PEAK:	1750	1579	1410	1264	1217	1331	1482	1431	1345	1453	1531	1661	1750		1750
	L.F.:	0.779	0.794	0.804	0.801	0.795	0.758	0.752	0.788	0.807	0.779	0.794	0.792	0.654		
2008	ENERGY:	1379	1270	1147	1022	977	1019	1128	1141	1097	1146	1228	1331	1157	2007-2008	1150
	PEAK:	1770	1599	1426	1276	1230	1345	1500	1449	1360	1471	1546	1680	1770		1770
	L.F.:	0.779	0.794	0.804	0.801	0.794	0.758	0.752	0.787	0.807	0.779	0.794	0.792	0.654		
2009	ENERGY:	1394	1283	1159	1031	986	1028	1140	1153	1109	1158	1241	1346	1169	2008-2009	1163
	PEAK:	1787	1614	1441	1288	1241	1358	1517	1464	1374	1487	1562	1698	1787		1787
	L.F.:	0.780	0.795	0.804	0.800	0.795	0.757	0.751	0.788	0.807	0.779	0.794	0.793	0.654		
2010	ENERGY:	1411	1299	1172	1043	996	1039	1154	1167	1123	1172	1256	1363	1182	2009-2010	1176
	PEAK:	1807	1634	1457	1303	1254	1374	1537	1482	1391	1505	1580	1719	1807		1807
	L.F.:	0.781	0.795	0.804	0.800	0.794	0.756	0.751	0.787	0.807	0.779	0.795	0.793	0.654		

* Forecast starts in January 1987.

SALES AND CUSTOMERS BY REVENUE CLASSIFICATION, HISTORICAL AND BASE CASE FORECAST

	HISTORICAL										BASE CASE FORECAST							
	1970				1980				1986				1987				1988			
	SALES		CUSTOMERS		SALES		CUSTOMERS		SALES		CUSTOMERS		SALES		CUSTOMERS		SALES		CUSTOMERS	
	MWH	%	AVG.NBR	%	MWH	%	AVG.NBR	%	MWH	%	AVG.NBR	%	MWH	%	AVG.NBR	%	MWH	%	AVG.NBR	%
RESIDENTIAL SALES -TOTAL	850321	19.7	147325	85.5	1538694	27.6	191026	85.1	1766168	27.4	204400	83.7	1809223	26.2	205474	83.5	1844168	26.1	206490	83.4
RES. RATE - 2 APTS.	1463	0.0	191	0.1	4181	0.1	347	0.2	4255	0.07	402	0.16	4650	0.07	396	0.2	4675	0.07	397	0.2
EMPLOYEES	8790	0.2	1304	0.8	25292	0.5	2364	1.1	34923	0.54	2665	1.09	36120	0.52	2673	1.1	36220	0.51	2678	1.1
RESIDENTIAL	827746	19.2	145329	84.3	1490370	26.7	187781	83.7	1706486	26.4	200713	82.1	1747518	25.3	201785	82.0	1782361	25.3	202794	81.9
G.S. RESIDENTIAL	4204	0.1	495	0.3	5389	0.1	533	0.2	6612	0.10	620	0.25	6943	0.10	620	0.3	6968	0.10	621	0.3
RESIDENTIAL W.H.	38	0.0	6	0.0	13	0.0	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
P.T. LIGHTING	420	0.0	NA	NA	1182	0.0	NA	NA	1322	0.02	NA	NA	1332	0.02	NA	NA	1344	0.02	NA	NA
YARD LIGHTING	7660	0.2	NA	NA	12267	0.2	NA	NA	12571	0.19	NA	NA	12660	0.18	NA	NA	12600	0.18	NA	NA
COMMERCIAL SALES -TOTAL	740096	17.2	21153	12.3	1363747	24.4	28439	12.7	1709024	26.5	33665	13.8	1725680	25.0	33996	13.8	1757363	24.9	34644	14.0
G.S. COMMERCIAL	716578	16.6	20559	11.9	1329394	23.8	27879	12.4	1674075	25.9	33294	13.6	1690311	24.4	33630	13.7	1722232	24.4	34283	13.8
COMMERCIAL W.H.	11860	0.3	480	0.3	11738	0.2	350	0.2	10833	0.2	301	0.1	11210	0.2	295	0.1	11020	0.2	290	0.1
ATHLETIC FIELDS	236	0.0	15	0.0	177	0.0	23	0.0	168	0.0	20	0.0	145	0.0	20	0.0	145	0.0	20	0.0
D.C. ELEVATORS	24	0.0	10	0.0	3	0.0	6	0.0	1	0.0	4	0.0	1	0.0	4	0.0	1	0.0	4	0.0
ELECTRIC CHURCH	0	0.0	0	0.0	894	0.0	31	0.0	863	0.0	37	0.0	977	0.0	37	0.0	977	0.0	37	0.0
SPECIAL CONTRACTS	3832	0.1	14	0.0	7471	0.1	8	0.0	9012	0.1	9	0.0	8900	0.1	10	0.0	8900	0.1	10	0.0
STREET LIGHTING	654	0.0	75	0.0	455	0.0	143	0.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
P.T. LIGHTING	109	0.0	NA	NA	1300	0.0	NA	NA	1552	0.0	NA	NA	1560	0.0	NA	NA	1572	0.0	NA	NA
YARD LIGHTING	6803	0.2	NA	NA	12317	0.2	NA	NA	12521	0.2	NA	NA	12576	0.2	NA	NA	12516	0.2	NA	NA
INDUSTRIAL SALE-TOTAL	476470	11.1	2284	1.3	662738	11.9	2213	1.0	725869	11.2	2214	0.9	659386	9.5	2226	0.9	679725	9.6	2236	0.9
G.S. INDUSTRIAL	475372	11.0	2260	1.3	661323	11.8	2197	1.0	725094	11.2	2206	0.9	658596	9.5	2218	0.9	678935	9.6	2228	0.9
INDUSTRIAL W.H.	280	0.0	14	0.0	281	0.0	9	0.0	100	0.0	8	0.0	108	0.0	8	0.0	108	0.0	8	0.0
STREET LIGHTING	42	0.0	10	0.0	278	0.0	7	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
P.T. LIGHTING	1	0.0	NA	NA	10	0.0	NA	NA	10	0.0	NA	NA	10	0.0	NA	NA	10	0.0	NA	NA
YARD LIGHTING	775	0.0	NA	NA	847	0.0	NA	NA	664	0.0	NA	NA	672	0.0	NA	NA	672	0.0	NA	NA
CONTRACT IND SALE-TOTAL	1818743	42.2	11	0.0	1381667	24.8	9	0.0	1559760	24.2	10	0.0	1981173	28.7	14	0.0	2018442	28.6	14	0.0
OTHER SALES -TOTAL	423403	9.8	1576	0.9	634226	11.4	2787	1.2	696123	10.8	4058	1.7	738445	10.7	4274	1.7	754887	10.7	4320	1.7
RES.-INTERDEPT.	16	0.0	2	0.0	9	0.0	2	0.0	9	0.0	1	0.0	8	0.0	1	0.0	8	0.0	1	0.0
G.S.-INTERDEPT.	8299	0.2	247	0.1	10018	0.2	212	0.1	12588	0.2	218	0.1	11808	0.2	224	0.1	11808	0.2	224	0.1
P.T. LIGHTING INTERDEPT.	0	0.0	0	0.0	31	0.0	0	0.0	32	0.0	0	0.0	34	0.0	0	0.0	34	0.0	0	0.0
YARD LIGHTING INTERDEPT.	14	0.0	0	0.0	20	0.0	0	0.0	16	0.0	0	0.0	16	0.0	0	0.0	16	0.0	0	0.0
STREET LIGHTING G&M	42692	1.0	699	0.4	50377	0.9	1327	0.6	53358	0.8	2700	1.1	56400	0.8	2741	1.1	56600	0.8	2782	1.1
G&M SPECIAL CONTRACTS	93092	2.2	110	0.1	59398	1.1	106	0.0	66158	1.0	106	0.0	68707	1.0	106	0.0	69179	1.0	106	0.0
IRRIGATION	14153	0.3	470	0.3	75796	1.4	1082	0.5	89003	1.4	976	0.4	98391	1.4	1145	0.5	98891	1.4	1150	0.5
USIIS	96591	2.2	1	0.0	92623	1.7	1	0.0	84582	1.3	1	0.0	84582	1.2	1	0.0	84761	1.2	1	0.0
REA - RESALE	168546	3.9	47	0.0	345953	6.2	57	0.0	390379	6.0	56	0.0	418500	6.1	56	0.0	433600	6.1	56	0.0
TOTAL SALES	4309032	100.0	172349	100.0	5581072	100.0	224473	100.0	6456944	100.0	244347	100.0	6913907	100.0	245984	100.0	7054585	100.0	247704	100.0

Table 7

BASE CASE SALES IN AVG MW, 1960-1986 ACTUAL(A), 1987-2010 FORECAST(F)

YEAR	RESIDENTIAL	COMMERCIAL	INDUSTRIAL	CONTRACT	OTHER	RAILROAD	TOTAL SALES	ENERGY LOAD AVG MW	PEAK LOAD MW	LOSS AND UNACCOUNTED-FOR % OF ENERGY	LOAD FACTOR
1960 A	59	42	29	137	32	10	310	359	545	13.8%	65.9%
1965 A	77	59	36	178	51	9	411	469	683	12.4%	68.7%
1970 A	97	84	48	217	48	8	503	564	782	10.8%	72.1%
1975 A	131	114	67	161	61	0	533	606	880	12.0%	68.9%
1980 A	176	156	76	158	72	0	637	745	1171	14.7%	63.6%
1986 A	202	195	83	178	79	0	737	839	1233	12.2%	68.0%
1987 F	207	197	75	226	84	0	789	897	1365	12.0%	65.7%
1992 F	217	216	83	235	93	0	844	959	1462	12.0%	65.6%
1997 F	235	240	94	233	102	0	904	1026	1567	11.9%	65.5%
2002 F	252	263	105	217	111	0	949	1076	1651	11.8%	65.2%
2010 F	276	290	127	224	127	0	1044	1182	1807	11.7%	65.4%
CAGR *											
60-70	5.1%	7.2%	5.2%	4.7%	4.1%	-2.2%	5.0%	4.6%	3.7%		
70-80	6.1%	6.4%	4.7%	-3.1%	4.1%	NA	2.4%	2.8%	4.1%		
80-86	2.3%	3.8%	1.5%	2.0%	1.6%	NA	2.5%	2.0%	0.9%		
60-86	4.8%	6.1%	4.1%	1.0%	3.5%	NA	3.4%	3.3%	3.2%		
87-97	1.3%	2.0%	2.3%	0.3%	2.0%	NA	1.4%	1.4%	1.4%		
97-10	1.2%	1.5%	2.3%	-0.3%	1.7%	NA	1.1%	1.1%	1.1%		
87-10	1.3%	1.7%	2.3%	-0.0%	1.8%	NA	1.2%	1.2%	1.2%		

LOW CASE SALES IN AVG MW, 1987-2010 FORECAST(F)

YEAR	RESIDENTIAL	COMMERCIAL	INDUSTRIAL	CONTRACT	OTHER	RAILROAD	TOTAL SALES	ENERGY LOAD AVG MW	PEAK LOAD MW	LOSS AND UNACCOUNTED-FOR % OF ENERGY	LOAD FACTOR
1987 F	203	194	75	202	84	0	757	860	1315	12.0%	65.4%
1992 F	201	199	82	204	89	0	776	881	1365	11.9%	64.5%
1997 F	209	211	93	187	94	0	794	900	1410	11.8%	63.8%
2002 F	215	222	104	187	99	0	827	939	1472	11.9%	63.8%
2010 F	218	228	126	187	106	0	864	981	1549	11.9%	63.3%
CAGR *											
87-97	0.3%	0.9%	2.4%	-0.9%	1.3%	NA	0.5%	0.5%	0.8%		
97-10	0.3%	0.6%	2.4%	0.0%	0.9%	NA	0.7%	0.7%	0.7%		
87-10	0.3%	0.7%	2.3%	-0.3%	1.0%	NA	0.6%	0.6%	0.7%		

HIGH CASE SALES IN AVG MW, 1987-2010 FORECAST(F)

YEAR	RESIDENTIAL	COMMERCIAL	INDUSTRIAL	CONTRACT	OTHER	RAILROAD	TOTAL SALES	ENERGY LOAD AVG MW	PEAK LOAD MW	LOSS AND UNACCOUNTED-FOR % OF ENERGY	LOAD FACTOR
1987 F	209	199	75	252	87	0	822	933	1400	11.9%	66.6%
1992 F	230	229	84	336	105	0	984	1115	1627	11.7%	68.5%
1997 F	258	264	94	365	124	0	1106	1253	1823	11.7%	68.7%
2002 F	284	296	106	404	146	0	1236	1398	2043	11.6%	68.4%
2010 F	342	357	128	413	189	0	1430	1615	2365	11.5%	68.3%
CAGR *											
87-97	2.1%	2.9%	2.3%	3.8%	3.6%	NA	3.0%	3.0%	2.7%		
97-10	2.2%	2.3%	2.4%	1.0%	3.3%	NA	2.0%	2.0%	2.0%		
87-10	2.2%	2.6%	2.4%	2.2%	3.4%	NA	2.4%	2.4%	2.3%		

* COMPOUND ANNUAL GROWTH RATE FOR THE SPECIFIED TIME PERIOD.

Table 8
Existing Hydro Resources

Plant Name	Number of Units	Installed	Installed Capacity	Critical Water Average MW*	Median Water Average MW*
Flint Creek	2	1901	1.1	1	1
Milltown	4	1906	3.4	2	2
	1	1926			
Mystic	2	1925	11.5	6	6
Hebgen[1/]	0	1915	0	0	0
Madison	4	1906	8.5	7	8
Hauser	5	1907	16.5	12	16
	1	1914			
Holter	4	1918	49	24	30
Black Eagle	3	1927	18	14	18
Rainbow	6	1910	35	29	35
	2	1927			
Cochrane	2	1958	50	22	34
Ryan	4	1915	60	41	56
	2	1916			
Morony	2	1930	47	25	36
Kerr[2/]	1	1938			
	1	1949	180	119	128
	1	1954			
Thompson Falls	2	1915			
	2	1916	40	35	34
	2	1917			
TOTAL	53		520	337	404

Canyon Ferry - 47,500 acre-feet owned by Montana Power Company in this U.S. Bureau of Reclamation Reservoir. This reservoir contains a total usable storage capacity of 1,512,000 acre-feet, most of which can serve to enhance annual energy production at MPC's downstream plants.

Hungry Horse - Zero storage owned by MPC, however, this U.S. Bureau of Reclamation Reservoir contains 3,161,000 acre-feet of usable storage, most of which can serve to enhance energy production at MPC's two plants downstream.

NOTES:

* Before maintenance.
1. Storage only, 373,500 acre-feet.
2. 1,219,000 acre-feet of storage.

Table 9
Existing Thermal Resources

Plant Name	Number Of Units	Commercial Operation Date	Capacity (MW)	Energy (Average MW)*	Fuel
JE Corette-Billings	1	09/01/68	151[5/]	127[5/]	Coal, Natural Gas Flame Stabilization
Colstrip Unit #1[1/]	1	11/15/75	165	135	)Coal, Propane) Start-Up)
Colstrip Unit #2[1/]	1	08/20/76	165	135	
Colstrip Unit #3[2/]	1	01/10/84	210	172	)Coal, Oil
Lake Diesel-YNP[3/]	1	07/10/67	2.75	-	Diesel
Old Faithful Diesel-YNP[4/]	2	09/01/79	2	-	Diesel

*Before maintenance.
1/ 50% of ownership by MPC, 330 MW installed capacity.
2/ 30% of ownership by MPC, 700 MW installed capacity.
3/ Available in summer months only, provides emergency power in event of line outages.
4/ Provides emergency power in event of line outages.
5/ The capacity and energy were reduced from the 180 MW and 139 average MW ratings reported in previous reports because of emission constraints within the Billings area.

Table 10
Existing Contract Resources

Contract	Termination Date	Capacity	Energy
BPA Peak for Energy Exchange	06/30/01	100	-29
Washington Public Power Supply System #1 (WNP #1)	06/30/96	80	68

Table 11

Existing Interruptible Load

Name	Maximum MW	Available During Winter(1)	Available During Summer(1)
Stauffer Chemical Company	64	Yes	Yes
Montana Resources, Inc	12	Yes	No

(1) Winter Season: November through February
Summer Season: March through October

Table 12
MPC
1987-2010 Electric Resource Plan
High and Low Cases

Resource Name	Type	MW Capacity	Average MW Energy[b]	High Case Start	High Case End[c]	Low Case Start	Low Case End[c]
Hydro, Existing	Hydro	518	337	N/A	-	N/A	-
Corette	Coal	151[a]	127[a]	N/A	Sep 2004	N/A	Sep 2004
Colstrip Unit #1	Coal	165	135	N/A	-	N/A	-
Colstrip Unit #2	Coal	165	135	N/A	-	N/A	-
Colstrip Unit #3	Coal	210	172	N/A	-	N/A	-
Milltown Upgrade	Hydro	1	1	Jan 1988	-	Jan 1988	-
Interruptible[i]	Contract	76	3	N/A	-	N/A	-
Bird	Gas/Oil	60	3	Nov 1989	Oct 2004	Jul 1996	Jun 2011
Programmatic Conservation	-	69[h]	63[h]	1986	-	1989	
Qualifying Facilities[d]	Cogen/Wind/ Hydro	260[e]	254[e]	Various	Various	Various	Various
Purchased Power[g]	Contract	498/237[eh]	542/0[eh]	Jan 1987	Dec 2010[f]	Jul 2001	Dec 2010[f]
BPA (PK/EN Exchange)	Contract	100	-29	N/A	Jun 2001	N/A	Jun 2001
WNP #1	Contract	80	68	N/A	Jun 1996	N/A	Jun 1996

[a]Reduced from previous reported values of 180 MW and 139 average MW due to emission constraints.
[b]Energy output at normal operation, critical water conditions for hydro units, before maintenance.
[c]Ending date pertains to Contracts only.
[d]These are customer owned resources acquired by MPC under PURPA guidelines.
[e]This is the maximum amount for these prospective contracts in the Base Case Scenario.
[f]End of planning horizon.
[g]In the event purchased power is not available, hydro upgrades and development may eventually be considered as a partial replacement of purchased power and could include upgrades at Kerr, Thompson Falls, and development at Hebgen.
[h]High/low.
[i]64 MW Stauffer Chemical Company plus 12 MW Montana Resources, Inc.

Note: NA means Not Applicable because the resource is existing.

Table 13
THE MONTANA POWER COMPANY
ENERGY - AVERAGE MW, Base Case

YEAR:	86-87	87-88	88-89	89-90	90-91	91-92	92-93	93-94	94-95	95-96	96-97	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10
ENERGY LOAD:	874	905	919	929	939	952	963	973	987	1002	1018	1032	1041	1050	1065	1074	1083	1098	1113	1125	1137	1150	1163	1176
ENERGY RESOURCES(1)																								
Hydro, critical	335	335	335	335	335	335	335	335	335	335	335	335	335	335	335	335	335	335	335	335	335	335	335	335
Corette	119	119	114	119	119	119	114	119	119	119	114	119	119	119	114	119	119	119	32	0	0	0	0	0
Colstrip 1	124	129	124	129	124	129	124	129	124	129	124	129	124	129	124	129	124	129	124	129	124	129	124	129
Colstrip 2	129	124	129	124	129	124	129	124	129	124	129	124	129	124	129	124	129	124	129	124	129	124	129	124
Colstrip 3	165	150	165	150	161	165	150	165	150	161	165	150	165	150	161	165	150	165	150	161	165	150	165	150
Milltown upgrade	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Bird	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0	0	0	0	0	0
Stauffer	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
MRI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BPA(PK/EN exchange)	-29	-29	-29	-29	-29	-29	-29	-29	-29	-29	-29	-29	-29	-29	-29	0	0	0	0	0	0	0	0	0
WNP # 1	68	68	68	68	65	65	65	65	65	65	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal	914	899	910	902	910	914	894	914	899	910	844	834	849	834	840	878	863	878	774	753	757	742	757	742
SURPLUS(DEFICIENCY):	40	-6	-9	-27	-29	-38	-69	-59	-88	-92	-174	-198	-192	-216	-225	-196	-220	-220	-339	-372	-380	-408	-406	-434
QF resource	2	11	43	78	88	88	97	115	131	139	146	153	160	167	174	182	188	196	207	220	230	239	246	254
SURPLUS(DEFICIENCY):	42	5	34	51	59	50	28	56	43	47	-28	-45	-32	-49	-51	-14	-32	-24	-132	-152	-150	-169	-160	-180
TENTATIVE RESOURCES(1)																								
Pro.Conservation(2)	1	2	4	7	10	13	18	23	32	41	52	63	63	63	63	63	63	63	63	63	63	63	63	63
Acquired energy(3)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	69	89	87	106	97	117
Acquired peak(3)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal	1	2	4	7	10	13	18	23	32	41	52	63	63	63	63	63	63	63	132	152	150	169	160	180
SURPLUS(DEFICIENCY): OVER CRITICAL WATER	43	7	38	58	69	63	46	79	75	88	24	18	31	14	12	49	31	39	0	0	0	0	0	0

NOTES:
1. Net of maintenance.
2. Total programmatic conservation estimates are taken from the ECP plan and the Street Lighting conservation program.
3. In the event purchase power is not available, hydro upgrades and development may eventually be considered as a partial replacement of purchased resources and could include upgrades at Kerr, Thompson Falls, and development at Hebgen.
4. Media, water adder.

	86-87	87-88	88-89	89-90	90-91	91-92	92-93	93-94	94-95	95-96	96-97	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10
existing	67	67	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68
future	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

OK,

Table 14
THE MONTANA POWER COMPANY
PEAK - MW, Base Case

YEAR:	86-87	87-88	88-89	89-90	90-91	91-92	92-93	93-94	94-95	95-96	96-97	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10
PEAK LOAD:	1365	1387	1402	1420	1439	1462	1478	1498	1519	1544	1567	1587	1598	1619	1640	1651	1672	1694	1714	1730	1750	1770	1787	1807
PEAK RESOURCES(1)																								
Hydro, critical	518	518	518	518	518	518	518	518	518	518	518	518	518	518	518	518	518	518	518	518	518	518	518	518
Corette	151	151	151	151	151	151	151	151	151	151	151	151	151	151	151	151	151	151	0	0	0	0	0	0
Colstrip 1	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165
Colstrip 2	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165
Colstrip 3	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210
Milltown upgrade	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Bird	0	0	0	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	0	0	0	0	0	0
Stauffer	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64
MRI	12	12	12	12	12	12	12	12	12	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BPA(PK/EN exchange)	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0	0
WNP # 1	80	80	80	80	77	77	77	77	77	77	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal	1465	1465	1466	1526	1523	1523	1523	1523	1523	1523	1434	1434	1434	1434	1434	1334	1334	1334	1123	1123	1123	1123	1123	1123
SURPLUS(DEFICIENCY):	100	78	64	106	84	61	45	25	4	-21	-133	-153	-164	-185	-206	-317	-338	-360	-591	-607	-627	-647	-664	-684
FORCED OUTAGE RESERV	142	142	147	149	150	151	152	152	153	154	154	155	155	159	163	167	171	174	174	159	162	166	169	172
NEW PLANT	0	0	0	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	0	0	0	0	0	0
SURPLUS(DEFICIENCY):	-42	-64	-83	-52	-75	-99	-116	-136	-158	-184	-296	-317	-328	-353	-378	-493	-518	-543	-765	-766	-789	-813	-833	-856
QF resource	1	13	47	89	89	89	107	127	136	144	151	158	165	172	179	186	193	203	215	228	237	245	253	260
SURPLUS(DEFICIENCY):	-41	-51	-36	37	14	-10	-9	-9	-22	-40	-145	-159	-163	-181	-199	-307	-325	-340	-550	-538	-552	-568	-580	-596
TENTATIVE RESOURCES(1)																								
Pro.Conservation(2)	2	3	6	10	13	16	21	27	36	46	57	69	69	69	69	69	69	69	69	69	69	69	69	69
Acquired energy(3)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	69	89	87	106	97	117
Acquired peak(3)	39	48	31	0	0	0	0	0	0	0	88	91	95	112	130	238	256	271	412	380	396	393	414	410
Subtotal	41	51	37	10	13	16	21	27	36	46	145	160	164	181	199	307	325	340	550	538	552	568	580	596
SURPLUS(DEFICIENCY):	0	0	1	47	27	6	12	18	14	6	0	1	1	0	0	0	0	0	0	0	0	0	0	0
FORCED OUTAGE RESERVES:																								
NEW PLANT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SURPLUS(DEFICIENCY):	0	0	1	47	27	6	12	18	14	6	0	1	1	0	0	0	0	0	0	0	0	0	0	0

NOTES:
1. Net of maintenance.
2. Total programmatic conservation estimates are taken from the ECP plan and the Street Lighting conservation program.
3. In the event purchase power is not available, hydro upgrades and development may eventually be considered as a partial replacement of purchased resources and could include upgrades at Kerr, Thompson Falls, and development at Hebgen.

Table 15
THE MONTANA POWER COMPANY
ENERGY - AVERAGE MW, High Case

YEAR:	86-87	87-88	88-89	89-90	90-91	91-92	92-93	93-94	94-95	95-96	96-97	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10
ENERGY LOAD:	902	950	983	1007	1027	1075	1122	1142	1172	1203	1233	1272	1302	1334	1365	1387	1409	1431	1454	1480	1510	1540	1570	1600
ENERGY RESOURCES(1)																								
Hydro, critical	335	335	335	335	335	335	335	335	335	335	335	335	335	335	335	335	335	335	335	335	335	335	335	335
Corette	119	119	114	119	119	119	114	119	119	119	114	119	119	119	114	119	119	119	32	0	0	0	0	0
Colstrip 1	124	129	124	129	124	129	124	129	124	129	124	129	124	129	124	129	124	129	124	129	124	129	124	129
Colstrip 2	129	124	129	124	129	124	129	124	129	124	129	124	129	124	129	124	129	124	129	124	129	124	129	124
Colstrip 3	165	150	165	150	161	165	150	165	150	161	165	150	165	150	161	165	150	165	150	161	165	150	165	150
Milltown upgrade	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Bird	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0	0	0	0	0	0
Stauffer	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
MRI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BPA(PK/EN exchange)	-29	-29	-29	-29	-29	-29	-29	-29	-29	-29	-29	-29	-29	-29	-29	0	0	0	0	0	0	0	0	0
WNP # 1	68	68	68	68	65	65	65	65	65	65	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal	914	899	910	902	910	914	894	914	899	910	844	834	849	834	840	878	863	878	774	753	757	742	757	742
SURPLUS(DEFICIENCY):	12	-51	-73	-105	-117	-161	-228	-228	-273	-293	-389	-438	-453	-500	-525	-509	-546	-553	-680	-727	-753	-798	-813	-858
QF resource	2	11	43	78	88	88	97	115	131	139	146	153	160	167	174	182	188	196	207	220	230	239	246	254
SURPLUS(DEFICIENCY):	14	-40	-30	-27	-29	-73	-131	-113	-142	-154	-243	-285	-293	-333	-351	-327	-358	-357	-473	-507	-523	-559	-567	-604
TENTATIVE RESOURCES(1)																								
Pro.Conservation(2)	1	2	4	7	10	13	18	23	32	41	52	63	63	63	63	63	63	63	63	63	63	63	63	63
Acquired energy(3)	0	38	27	21	20	60	113	90	110	113	191	222	230	270	288	264	295	294	410	444	460	497	505	542
Acquired peak(3)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal	1	40	31	28	30	73	131	113	142	154	243	285	293	333	351	327	358	357	473	507	523	560	568	605
SURPLUS(DEFICIENCY): OVER CRITICAL WATER	15	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1

NOTES:
1. Net of maintenance.
2. Total programmatic conservation estimates are taken from the ECP plan and the Street Lighting conservation program.
3. In the event purchase power is not available, hydro upgrades and development may eventually be considered as a partial replacement of purchased resources and could include upgrades at Kerr, Thompson Falls, and development at Hebgen.
4. Median water adder.

	86-87	87-88	88-89	89-90	90-91	91-92	92-93	93-94	94-95	95-96	96-97	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10
existing	67	67	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68
future	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

OK,

Table 16
THE MONTANA POWER COMPANY
PEAK - MW, High Case

YEAR:	86-87	87-88	88-89	89-90	90-91	91-92	92-93	93-94	94-95	95-96	96-97	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10
PEAK LOAD:	1400	1439	1472	1510	1540	1627	1653	1683	1730	1763	1808	1853	1884	1929	1977	2008	2043	2076	2108	2141	2185	2230	2274	2320
PEAK RESOURCES(1)																								
Hydro, critical	518	518	518	518	518	518	518	518	518	518	518	518	518	518	518	518	518	518	518	518	518	518	518	518
Corette	151	151	151	151	151	151	151	151	151	151	151	151	151	151	151	151	151	151	0	0	0	0	0	0
Colstrip 1	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165
Colstrip 2	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165
Colstrip 3	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210
Milltown upgrade	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Bird	0	0	0	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	0	0	0	0	0	0
Stauffer	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64
MRI	12	12	12	12	12	12	12	12	12	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BPA(PK/EN exchange)	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0	0
WNP # 1	80	80	80	80	77	77	77	77	77	77	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal	1465	1465	1466	1526	1523	1523	1523	1523	1523	1523	1434	1434	1434	1434	1434	1334	1334	1334	1123	1123	1123	1123	1123	1123
SURPLUS(DEFICIENCY):	65	26	-6	16	-17	-104	-130	-160	-207	-240	-374	-419	-450	-495	-543	-674	-709	-742	-985	-1018	-1062	-1107	-1151	-1197
FORCED OUTAGE RESERV	142	142	147	149	150	151	152	152	153	154	154	155	155	159	163	167	171	174	155	159	162	166	169	172
NEW PLANT	0	0	0	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	0	0	0	0	0	0
SURPLUS(DEFICIENCY):	-77	-116	-153	-142	-176	-264	-291	-321	-369	-403	-537	-583	-614	-663	-715	-850	-889	-925	-1140	-1177	-1224	-1273	-1320	-1369
QF resource	1	13	47	89	89	89	107	127	136	144	151	158	165	172	179	186	193	203	215	228	237	245	253	260
SURPLUS(DEFICIENCY):	-76	-103	-106	-53	-87	-175	-184	-194	-233	-259	-386	-425	-449	-491	-536	-664	-696	-722	-925	-949	-987	-1028	-1067	-1109
TENTATIVE RESOURCES(1)																								
Pro.Conservation(2)	2	3	6	10	13	16	21	27	36	46	57	69	69	69	69	69	69	69	69	69	69	69	69	69
Acquired energy(3)	0	38	27	21	20	60	113	90	110	113	191	222	230	270	288	264	295	294	410	444	460	497	505	542
Acquired peak(3)	74	62	74	22	55	99	50	77	87	100	138	134	150	152	179	331	332	359	446	437	458	462	493	498
Subtotal	76	103	107	53	88	175	184	194	233	259	386	425	449	491	536	664	696	722	925	950	987	1028	1067	1109
SURPLUS(DEFICIENCY):	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
FORCED OUTAGE RESERVES:																								
NEW PLANT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SURPLUS(DEFICIENCY):	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0

NOTES:
1. Net of maintenance.
2. Total programmatic conservation estimates are taken from the ECP plan and the Street Lighting conservation program.
3. In the event purchase power is not available, hydro upgrades and development may eventually be considered as a partial replacement of purchased resources and could include upgrades at Kerr, Thompson Falls, and development at Hebgen.

OK,

Table 17
THE MONTANA POWER COMPANY
ENERGY - AVERAGE MW, Low Case

YEAR:	86-87	87-88	88-89	89-90	90-91	91-92	92-93	93-94	94-95	95-96	96-97	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10
ENERGY LOAD:	845	865	870	872	874	879	885	887	890	900	903	905	913	921	928	935	942	948	955	959	962	967	972	978
ENERGY RESOURCES(1)																								
Hydro, critical	335	335	335	335	335	335	335	335	335	335	335	335	335	335	335	335	335	335	335	335	335	335	335	335
Corette	119	119	114	119	119	119	114	119	119	119	114	119	119	119	114	119	119	119	32	0	0	0	0	0
Colstrip 1	124	129	124	129	124	129	124	129	124	129	124	129	124	129	124	129	124	129	124	129	124	129	124	129
Colstrip 2	129	124	129	124	129	124	129	124	129	124	129	124	129	124	129	124	129	124	129	124	129	124	129	124
Colstrip 3	165	150	165	150	161	165	150	165	150	161	165	150	165	150	161	165	150	165	150	161	165	150	165	150
Milltown upgrade	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Bird	0	0	0	0	0	0	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Stauffer	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
MRI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BPA(PK/EN exchange)	-29	-29	-29	-29	-29	-29	-29	-29	-29	-29	-29	-29	-29	-29	-29	0	0	0	0	0	0	0	0	0
WNP # 1	68	68	68	68	65	65	65	65	65	65	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal	914	899	910	900	908	912	892	912	897	908	844	834	849	834	840	878	863	878	776	755	759	744	759	744
SURPLUS(DEFICIENCY):	69	34	40	28	34	33	7	25	7	8	-59	-71	-64	-87	-88	-57	-79	-70	-179	-204	-203	-223	-213	-234
QF resource	2	11	43	78	88	88	88	88	88	97	115	131	139	146	153	160	167	174	182	188	196	207	220	230
SURPLUS(DEFICIENCY):	71	45	83	106	122	121	95	113	95	105	56	60	75	59	65	103	88	104	3	-16	-7	-16	7	-4
TENTATIVE RESOURCES(1)																								
Pro.Conservation(2)	0	0	0	0	1	2	4	7	10	13	18	23	32	41	52	63	63	63	63	63	63	63	63	63
Acquired peak(3)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal	0	0	0	0	1	2	4	7	10	13	18	23	32	41	52	63	63	63	63	63	63	63	63	63
SURPLUS(DEFICIENCY): OVER CRITICAL WATER	71	45	83	106	123	123	99	120	105	118	74	83	107	100	117	166	151	167	66	47	56	47	70	59

NOTES:
1. Net of maintenance.
2. Total programmatic conservation estimates are taken from the ECP plan and the Street Lighting conservation program.
3. In the event purchase power is not available, hydro upgrades and development may eventually be considered as a partial replacement of purchased resources and could include upgrades at Kerr, Thompson Falls, and development at Hebgen.
4. Median water adder.

	86-87	87-88	88-89	89-90	90-91	91-92	92-93	93-94	94-95	95-96	96-97	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10
existing	67	67	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68
future	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

OK,

Table 18
THE MONTANA POWER COMPANY
PEAK - MW, Low Case

YEAR:	86-87	87-88	88-89	89-90	90-91	91-92	92-93	93-94	94-95	95-96	96-97	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10
PEAK LOAD:	1315	1331	1337	1344	1352	1365	1375	1378	1391	1408	1410	1423	1436	1449	1461	1472	1483	1494	1505	1510	1520	1530	1538	1549
PEAK RESOURCES(1)																								
Hydro, critical	518	518	518	518	518	518	518	518	518	518	518	518	518	518	518	518	518	518	518	518	518	518	518	518
Corette	151	151	151	151	151	151	151	151	151	151	151	151	151	151	151	151	151	151	0	0	0	0	0	0
Colstrip 1	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165
Colstrip 2	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165
Colstrip 3	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210
Milltown upgrade	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Bird	0	0	0	0	0	0	0	0	0	0	60	60	60	60	60	60	60	60	60	60	60	60	60	60
Stauffer	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64
MRI	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
BPA(PK/EN exchange)	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0	0
WNP # 1	80	80	80	80	77	77	77	77	77	77	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal	1465	1465	1466	1466	1463	1463	1463	1463	1463	1463	1446	1446	1446	1446	1446	1346	1346	1346	1195	1195	1195	1195	1195	1195
SURPLUS(DEFICIENCY):	150	134	129	122	111	98	88	85	72	55	36	23	10	-3	-15	-126	-137	-148	-310	-315	-325	-335	-343	-354
FORCED OUTAGE RESERV	142	142	147	149	150	151	152	152	153	154	154	155	155	159	163	167	171	174	155	159	162	166	169	172
NEW PLANT	0	0	0	0	0	0	0	0	0	0	9	9	9	9	9	9	9	9	9	9	9	9	9	9
SURPLUS(DEFICIENCY):	8	-8	-18	-27	-39	-53	-64	-67	-81	-99	-127	-141	-154	-171	-187	-302	-317	-331	-474	-483	-496	-510	-521	-535
QF resource	1	13	47	89	89	89	89	89	89	107	127	136	144	151	158	165	172	179	186	193	203	215	228	237
SURPLUS(DEFICIENCY):	9	5	29	62	50	36	25	22	8	8	0	-5	-10	-20	-29	-137	-145	-152	-288	-290	-293	-295	-293	-298
TENTATIVE RESOURCES(1)																								
Pro.Conservation(2)	0	0	0	1	2	3	6	10	13	16	21	27	36	46	57	69	69	69	69	69	69	69	69	69
Acquired peak(3)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	68	77	85	221	225	230	233	232	237
Subtotal	0	0	0	1	2	3	6	10	13	16	21	27	36	46	57	137	146	154	290	294	299	302	301	306
SURPLUS(DEFICIENCY):	9	5	29	63	52	39	31	32	21	24	21	22	26	26	28	0	1	2	2	4	6	7	8	8
FORCED OUTAGE RESERVES:																								
NEW PLANT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SURPLUS(DEFICIENCY):	9	5	29	63	52	39	31	32	21	24	21	22	26	26	28	0	1	2	2	4	6	7	8	8

NOTES:
1. Net of maintenance.
2. Total programmatic conservation estimates are taken from the ECP plan and the Street Lighting conservation program.
3. In the event purchase power is not available, hydro upgrades and development may eventually be considered as a partial replacement of purchased resources and could include upgrades at Kerr, Thompson Falls, and development at Hebgen.

OK,

TRANSMISSION
Ten-Year Plan

Exhibit C
6/23/87

Project & General Location	Voltage (kV)	Approx Length (Miles)	1987 1st Qtr	1987 2nd Qtr	1987 3rd Qtr	1987 4th Qtr	1988 1st Half	1988 2nd Half	1989 1st Half	1989 2nd Half	1990	1991	1992	1993	1994	1995	1996
East Gallatin-Jackrabbit	161	12	C		C	R	R	C	R								
Jackrabbit-Ennis	161	39							P	C	C	R	R	R	R		
Ennis-Big Sky	161	25	P	P	C	C	C	R	R	R	R						
Laurel-Bridger "B"	100	25	CL	CL	CL	CL	P	P	P	P	C	C	R	R	R	R	
Anaconda-Philipsburg	100	26							S	S	CX	CX	P	C	C	R	R
Phillipsburg-Drummond	100	26											S	CX	CX	P	C
Three Forks-Helena	230	50					S	S	S	F	CT	CT	CL	CL	P	C	C
Roundup-Ivanhoe	100	41					S	S	CX	CX	CX	CX	P	C	C	R	R
Ovando-Missoula	230	60									S	S	F	CT	CT	CL	CL
Plains-St Regis-Superior	100	25										S	CX	CX	CX	P	C
Judith Gap-Glengarry	100	32	CL	CL	P	P	P	C	C	C	R	R	R	R			
Clyde Park-Emigrant	161	42			C	C		C	R	R	R	R					
Emigrant-Gardiner	69	25	CL	CL	P	P	P	C	R	C	R	R	R	R			
Bonner-Missoula #4	161	15	C	C	C		C	R	R	R	R						
Helena-Great Falls	230	80							S	S	S	F	CT	CT	CL	CL	P

S = Study Time
F = File Application
CT = State Approval of Certificate
CL = State Approval of Centerline
CX = Qualifying for Excluded Facility
P = Preconstruction
C = Construction
R = Post Construction Reclamation

POTENTIAL TRANSMISSION

Project & General Location	Voltage (kV)	Approx Length (Miles)	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Three Rivers-Jackrabbit	161	30	S	S	S	S	S	S	S	S	S	S
Golden Sunlight-Renova	161	15	S	S	S	S	S	S	S	S	S	S
Big Timber-Nye	161	40	S	S	S	S	S	S	S	S	S	S

S = Study Time

TRANSMISSION PROJECT FOR CONVERSION TO HIGHER
VOLTAGE LEVELS OR TO BE RECONDUCTORED OR RECONSTRUCTED

Exhibit E
6/23/87

Project & General Location	Voltage (kV)	Approx Length (Miles)	1987 1st Qtr	1987 2nd Qtr	1987 3rd Qtr	1987 4th Qtr	1988 1st Half	1988 2nd Half	1989	1990	1991	1992	1993	1994	1995	1996
Madison-Three Forks Rebuild	50/100	28.9	S	S	S	S	S	CX	P	C	C	C	R	R	R	R
Great Falls-Two Dot Rebuild	100	81.8								S	S	CX	CX	CX	P	P
Great Falls-Morel Rebuild	100	121.1							S	S	CX	CX	CX	P	P	C
East Helena-Townsend	100	27.4								S	CX	CX	CX	P	C	C

S = Study Time
CX = Qualifying for Excluded Facility
P = Preconstruction
C = Construction
R = Post Construction Reclamation

LEX (A)6

Firm and Nonfirm Resource Sales and Purchases List of Contracts

	Date of Instrument	Contract No.	FPC/FERC Rate Schedule #
Pacific Northwest Coordination Agreement	09/01/64	14-03-48221	45
BPA Power Sales Contracts	08/27/82	DE-MS79-81BP90427	
BPA Residential Purchase and Sale Agreement	08/27/82	DE-MS79-81BP90605	
BPA & WPPSS-WNP No. 1 Exchange Agreement	02/06/73	14-03-39212	138
BPA-Exportable Energy Contract	01/13/69	14-03-73155	
BPA-Recreation Storage	06/02/87		
USBR-Interconnection Transmission and Interutilities Operations Agreement	10/15/84	4-07-60-P0228	
USBR-Missouri River Coordination Agreement	03/30/72	14-06-600-476A	
ICP Agreement (Intercompany Pool)	09/01/73		73
Southern California Edison Sales Agreement	10/17/75	MS-1	
PP&L-Montana Exchange Agreement	12/21/65		28
USIIS Sales Agreement (Flathead Irrigation Project)	06/23/80		
WSCC Agreement (Western System Coordinating Council)	08/04/67		
Central Montana Generation and Transmission Coop Sales Contract	01/30/74		
Big Horn Coop Power Sales Agreement	10/20/82		
Cowlitz County PUD - Storage in MPC	02/01/82		136
City of Tacoma - Storage in MPC	07/02/82		140
PUD #1 of Chelan County - Storage in MPC	09/07/82		142
Montana Nonfirm Sales Tariff, M-1 (see Attached List of Signators)	08/06/76		

Firm and Nonfirm Resource
Sales and Purchases
List of Contracts

	Date of Instrument	Contract No.	FPC/FERC Rate Schedule #
Montana Service Schedule Under Idaho Power Nonfirm Sales Tariff, M-1	10/09/78		
Montana Service Schedule Under Sierra Pacific Nonfirm Sales Tariffs	12/09/82	Schedule RT	
Montana Service Schedule Under PP&L Nonfirm Sales Tariff	10/05/84	Schedule PPL-3	
Western Area Power Administration (CVP) - Energy Sales Agreement	06/15/87		
Sierra Pacific Power Company Sales Agreement	06/15/87		
Sacramento Municipal Utility District Sales Agreement	06/15/87		
Washington Water Power Company Sales Agreement	06/15/87		
Basin Electric Power Coop Energy Purchase	06/15/87		

Wheeling Contracts
List of Contracts

	Date of Instrument	Contract No.	FPC/FERC Rate Schedule #
BPA-Hot Springs-Anaconda Wheeling Letter Agrement	10/22/63	14-03-40534	
BPA-Glacier Coop Wheeling Agreement	08/25/75	14-03-59142	
BPA-Missoula Coop Wheeling Agreement	01/15/68	14-03-74725	
BPA-Ravalli Coop Wheeling Agreement	01/15/68	14-03-74726	
BPA-Northern Lights Coop Wheeling Agreement	01/15/68	14-03-74724	
BPA-Vigilante Coop Wheeling Agreement	08/21/67	14-03-53715	
USBR-Anaconda-Billings or Hot Springs-Yellowtail Wheeling Letter Agreement	03/22/68		
USBR-Cut Bank Line and Area Transmission Agreement	07/04/70	14-06-600-58A	
Glacier Coop-Cut Bank Interconnection Agreement	04/05/71		
AMPS Interconnection Agreement	04/21/65		27
Idaho, Utah and Montana Interconnection Agreement	03/04/41		3
PP&L-Montana Mututal Wheeling Letter Agreement	05/24/67		29
PP&L-Montana Mututal Wheeling Letter Agrement	09/01/81		
Colstrip Project Transmission Agreement	05/06/81		
BPA-Montana Intertie Agreement	04/17/81	DE-MS70 81BP90210	
BPA-Transmission Agreement (Garrison West)	04/17/81	DE-MS79 81BP90166	

Index of Purchasers Executing Service Agreements
To The Montana Power Company FPC Electric Tariff, M-1

Purchase	Rate(s)	Date of Execution	Effective Date	Term of Agreement
Los Angeles Department of Water and Power	All	10/14/76	10/14/76	Undefined*
Utah Power and Light Company	All	11/01/76	11/01/76	Undefined*
City of Pasadena	All	11/17/76	11/17/76	Undefined*
San Diego Gas and Electric Company	M-1.1, M-1.2 M-1.3, M-1.4	11/23/76	11/23/76	Undefined*
City of Burbank	All	03/15/77	03/15/77	Undefined*
Portland General Electric Company	All	04/11/77	04/11/77	Undefined*
Public Utility District No. 1 of Chelan County	All	04/28/77	04/15/77	Undefined*
Washington Water Power Company	All	06/06/77	04/14/77	Undefined*
Southern California Company	All except M-1.3	12/28/77	09/01/77	Undefined*
City of Glendale	All	01/06/78	01/06/78	Undefined*
Tri-State Generation and Transmission Association, Inc.	All	02/03/78	02/03/78	Undefined*
Puget Sound Power and Light Company	All	11/27/79	11/27/79	Undefined*
Nevada Power Company	M-1.3	05/24/80	05/24/80	Undefined*
Public Service Company of Colorado	All	06/10/80	06/05/80	Undefined*
Platte River Power Authority	All except M-1.6	09/16/80	09/16/80	Undefined*

*All may be terminated by either party upon seven days written notice.

Index of Purchasers Executing Service Agreements
To The Montana Power Company FPC Electric Tariff, M-1

Purchase	Rate(s)	Date of Execution	Effective Date	Term of Agreement
Arizona Electric Power Cooperative, Inc.	All	08/10/81	07/01/81	Undefined*
Idaho Power Company	All	07/01/81	07/01/81	Undefined*
Intermountain Consumer Power Association	All	03/16/82	03/16/82	Undefined*
City of Colorado Springs	All	05/01/82	05/01/82	Undefined*
Public Service Company of New Mexico	All	05/01/82	05/01/82	Undefined*
Pacific Gas and Electric Company	All	07/23/82	07/26/82	Undefined*
Sierra Pacific Power Company	All	08/30/82	08/30/82	Undefined*
City of Riverside	All	09/29/82	09/29/82	Undefined*
City of Santa Clara	All	12/07/82	09/29/82	Undefined*
Plains Electric G&T Co-op	All	16/13/83	04/01/83	Undefined*
Pacific Power and Light Company	All	11/21/83	03/01/83	Undefined*
City of Farmington	All	09/01/83	08/12/83	Undefined*
Western Area Power Administration	All	11/29/83	11/17/83	Undefined*
Eugene Water and Electric Board	All	03/01/84	01/16/84	Undefined*
Northern California Power Agency	All	08/13/84	08/15/84	Undefined*
Municipal Energy Agency of Nebraska	All	08/15/84	08/15/84	Undefined*

*All may be terminated by either party upon seven days written notice.

Index of Purchasers Executing Service Agreements
To The Montana Power Company FPC Electric Tariff, M-1

Purchase	Rate(s)	Date of Execution	Effective Date	Term of Agreement
Municipal Energy Agency of Nebraska	All	08/15/84	08/15/84	Undefined*
City of Anaheim Public Utilities Department	All	10/05/84	10/05/84	Undefined*
California Department of Water Resources	All	11/01/84	11/01/84	Undefined*
City of Port Angeles	All	11/05/85	11/05/85	Undefined*
Sacramento Municipal Utility District	All	01/16/86	01/16/86	Undefined*
Basin Electric Power Cooperative	All	11/17/86	11/01/86	Undefined*
Black Hills Power and Light Company	All	12/16/86	12/01/86	Undefined*

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*All may be terminated by either party upon seven days written notice.

EXHIBIT G IS VOLUMINOUS

AND HAS BEEN SUBMITTED ONLY

TO THE DEPARTMENT OF

NATURAL RESOURCES AND CONSERVATION

EXHIBIT H IS VOLUMINOUS

AND HAS BEEN SUBMITTED ONLY

TO THE DEPARTMENT OF

NATURAL RESOURCES AND CONSERVATION